# ARUBA

Diversification for sustainable growth and reduction of risk

Steps Toward the Design and Implementation of a Strategy

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FIAS

The Investment Climate Advisory Service

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# EXECUTIVE SUMMARY

i Aruba has made a great success in development led principally by tourism. This success is the result of appropriate pursuit of the island's evident inherent advantages in this sector, supported by good government, and an environment providing high levels of the rule of law and of personal security. With this success has come the associated risk of "putting all your eggs in one basket" – to a downturn in the U.S. economy which is still the principal source of tourism revenues, and/or a loss of competitiveness of Aruba in the industry, especially due to new entrants in the area, probably including Cuba at some future time. The Government is therefore interested in future development through diversified, sustainable growth.

ii For a very small island, a concomitant small population, a resulting small domestic market (in spite of high per capita income), and essentially no natural resources, possibilities for diversifying the economy into other activities are limited. Several attempts in the last decade or so have not done well. However, the Government is committed to renewed efforts to diversify. The recent IMF mission in January 2005 endorsed this concept,, noting the slow growth in labor productivity in recent years, and concluding that only through diversification into higher-value-added activities could future productivity growth, so essential to Aruba, be achieved.

iii To make this diversification effort effective, two complementary kinds of analysis and understanding are needed:

- To enable the limited resources available for investment promotion to be allocated wisely, some picture of potential paths that diversification might follow has to be formed. This picture is also needed to help to identify and prioritize efforts to improve the business climate, focusing on dimensions that are important for the diverse activities that are desired. The need for this kind of analysis is the greater, to the extent that the country in question is small and/or has limited resources and markets. A Brazil or a Mexico or a China can, and does, attract investments in virtually every activity, but a Costa Rica or a Jamaica or, even more Aruba, cannot expect to do this and must figure out where to focus. This is not a question of "picking winners" in the sense of identifying two or three projects and allocating public funds to them; rather it should be an analysis of the island's competitive strengths and weaknesses, the lessons of other nations and of Aruba's own past, seeking to identify broad types of economic activity that are both desirable for Aruba and likely to be profitable for private investment in Aruba. This is the "What" of a diversification strategy.

- To facilitate the emergence of these activities, as well as of others that might be missed in such analysis, requires an analysis of the business climate, especially as it relates to the kinds of activities that the

Government hopes can be attracted, and then to take actions to improve that climate. In general this analysis may include the legal framework, the functioning of the judicial system and the rule of law in the country, taxation and incentives, regulation and functioning of labor markets, red tape and administrative barriers, etc. etc. In some respects parts of the private sector, including business, labor, educational, and other groups, will need to cooperate, but the Government is the one that will have to take most of the actions since the things to be changed are, for the most part, creations of public policy or at least subject to it. This is the "How" of a diversification strategy.

## Diversification: What?

iv The Government's focus on diversification, to achieve sustainable growth and to reduce the risks caused by Aruba's great dependence on tourism, is both desirable and feasible. Diversification is the right strategy for future growth in Aruba, and it is feasible in spite of the nation's strong advantages and great successes in tourism, and its small size and lack of natural resources.

v No analysis is needed to demonstrate or to justify that Aruba has a strong vocation for tourism. Aruba's beautiful beaches, friendly population, accessible location away from hurricane-prone areas, and high level of security add up to a superior location that competes successfully now and must be nurtured for the future. Tourism is likely to remain the nation's driving economic force, even if diversification occurs. Diversification is feasible, but must be viewed as a challenging, long-term proposition.

## Some Criteria for Desirable Diversification

vi With a per capita GDP of over $20,000 per year ($21,129 was the estimate for 2003, which was not a good year) and an unemployment rate that has been in the range between 6.0 and 7.0 percent except for a temporary dip after the drop in tourism following 9/11, Aruba is a prosperous country. Like any society, it can always hope and try to do better, but it is far from the other extreme of desperately seeking any investment that will provide jobs, of whatever nature and at whatever price to the island. In this situation, Aruba can, should, and does wish to impose some criteria on targets for diversification. The FIAS team found a fairly strong consensus as to these unofficial criteria to be something like the following:

- Rely mainly on the local labor force, rather than require additional expatriates to come to the island, to the extent possible. This criterion reflects the fact that over 40 percent of the labor force are expatriates, and it relates especially to lower-skilled expatriate workers.

- Generate relatively high-paying jobs. This may well involve the immigration of a small number of individuals with specific skills and/or entrepreneurial ability, including possibly some citizens of Aruba now living abroad.

- Enhance, or at a minimum not detract from, Aruba's advantages in tourism.

- Suit, not strain, the island's carrying capacity for workers, visitors, residents, water usage, waste disposal capacity, land, and other scarce resources.

- Serve markets in which international demand is growing.

- Respond counter-cyclically to the tourism industry – if and to the extent possible.

- Be viable, profitable private sector investments.

## Some Diversification Opportunities

vii The first place to seek diversification possibilities is within a triad of activities involving education, health care, and diversification within the tourist sector. These include the following:

- <u>Education</u>

    - ♦ Research and study-abroad programs linked to foreign universities, think tanks and research institutions

    - ♦ Primary and secondary boarding schools, designed principally for tuition-paying students from abroad

    - ♦ Private pre-schools, K-12 schools, and professional training and development institutions, designed primarily for the people of Aruba.

    - ♦ Additional medical schools

- <u>Health care</u>

    - ♦ The additional medical schools, just mentioned above
    - ♦ Rehabilitation facilities

- ♦ Holistic health care and related education and training

- ♦ Cosmetic surgery

- ♦ Diagnostic testing

- Tourism diversification

    - ♦ Broadening the base of tourist source nations

    - ♦ Developing upscale leisure niches

    - ♦ Real estate developments, especially those linked to the education and health care activities

    - ♦ Developing the full spectrum of the industry, including "MICE" (meetings, employee incentive travel, conventions and special events)

viii There are many obvious and important synergies among these activities. That is one of the main reasons why FIAS has identified this triad as the highest priority for promotion. Even a casual glance at the list brings many complementary, mutually reinforcing linkages to mind. For example: Aruba's good climate, good personal security and law and order, friendly population, and location accessible to both the USA and some Central and South American countries now experiencing some political and social unrest suggest all kinds of business possibilities, and linkages among, health care, primary and secondary boarding schools, and high-quality part-time or retirement residential development. Well-to-do families from Colombia or Venezuela might send children to high-quality, bilingual boarding schools on Aruba; the parents might live part of the time in a high-level housing development; older residents of these countries might retire to Aruba. This would be complementary to health care facilities for private patients. And so on. Developments in these sectors would also have mutually reinforcing linkages with traditional tourism, and "medical tourism" such as cosmetic surgery.

ix Education and health care activities have already begun to develop as offshoots of tourism and with additional investment can mature into independent sectors in their own right, with continued links to tourism. For example, presently leisure tourists purchase a few hours of spa care. With the development of the health care sector, some additional visitors will come principally for treatment. In education, current courses have a tourism focus, such as a two-week course for scuba trainers, or hospitality training. With additional investment in the sector, there can be a broader range of course content. The new markets can reduce the ups and downs of leisure tourism by creating among consumers a unique reason for coming specifically to Aruba, essentially "tying" the consumers to Aruba.

x In health care, as in education, it will be crucial for Aruba to view the sector both as a business in which the island can succeed to earn money and create jobs by serving international and local markets for profit, and also as a complementary instrument for caring for the people of Aruba. There need be no conflict between these two goals; indeed there are many complementarities that can be created and exploited. It would be tragic to miss these opportunities by viewing private, for-profit health care or education as in some way antagonistic or inconsistent with good health care and education systems for the people of Aruba. Creative leadership can develop and exploit the complementarities with a win-win, positive-sum approach.

xi Job prospects in the health care sectors will include doctors, nurses, medical technicians, therapists, medical specialists, administrators, marketers, and administrative assistants. Educational institutions would similarly require many highly-skilled employees. Some expatriates will be needed initially and periodically (probably more in health care and only a few in education) e.g. in health care to bring new therapies and technologies which will be adopted locally. But no extensive immigration is foreseen, and the immigration that would occur would be concentrated in medium- and high-skilled professionals.

xii Promoting this triad of education, health care and tourism diversification would require important reforms in the personal income tax, the various taxes on business, immigration and work permits for expatriates, and other labor market regulation as well. This will be discussed below.

xiii The main report discusses many other activities, in addition to those identified above, that may have good potential for diversification. A few of these may be mentioned here:

- Privatization of some public utilities, and government services: The main purpose here would be to increase efficiency and reduce the public sector deficit. But there would probably be some diversification effects in the future, as the private companies that undertook this work found ways to branch out profitably.

- Other professional services: Aruba is already exporting its tourism management expertise to Panama and to Peru; this kind of activity could well increase.

- Building "Brand Aruba:" The tourists who visit Aruba represent a potential market for items such as swimwear, resort wear, active wear, sportswear, sandals, specialty food items, and artisanal handcrafted objects. These could be designed in Aruba and marketed from Aruba, and manufactured either in Aruba in some cases, or for many items in a lower cost location. Aruba Aloe's plan to export to the U.S. is an example that could be replicated in many lines.

Environmental protection: Opportunities here are an instance of "turning lemons into lemonade." As Aruba's resident and tourist population has grown, so have the pressures on the island's waste management systems. These pressures create business opportunities.

xiv These and other possibilities are discussed in the main report. We present them in full acknowledgement that FIAS does not have access to any crystal balls. We have identified some activities that appear to offer the greatest prospects for Aruba because Aruba may have inherent comparative and competitive advantages to compete successfully and gain, maintain and enhance market share in these growing international markets. In actuality, entrepreneurs identify and act on growth opportunities independently. Some investments will succeed, and some will fail. The rest of our analysis is devoted to how to increase the number of diversifying investments, and their rate of success.

## Diversification: How?

xv Aruba already has a good business climate, as its prosperity attests. But that business climate was well-adapted for Aruba's success in the one activity where its comparative advantage so clearly lies, and upon examination is not so well-adapted for success in diversification and sustained growth in the future.

xvi FIAS has identified four areas where Government needs to act in order to achieve its goals. There may be additional actions that would also be productive, but these four are the most important. They are:

- Taxation and incentives
- Investment promotion
- Education and labor training
- Regulation and administrative barriers, in a few particular areas

## Taxation and Incentives

xvii Even if Aruba's goal were to continue to attract more and more hotels, its current tax system – since the changes that were put into effect at the start of 2003 -- would not work well to facilitate such development. With the different and more difficult goal of fostering diversification through investments in other activities, which do not have a proven track record that makes their advantages in Aruba obvious, FIAS analysis shows that Aruba's tax system needs quite a few reforms to make it work effectively.

xviii Overall fiscal balance: Aruba appears to have a structural deficit, with excessive deficits and growing public debt even in prosperous times. Any tax reform must address this problem. The January 2005 IMF mission's report lays out a strategy which would be completely consistent with FIAS recommendations.

xix Corporate profit tax, and other taxes on businesses: Since January 2003 Aruba has had, in effect, two different corporate tax regimes: The IPC regime introduced at that time purports to give strong incentives to designated selected investments, and what might be called the "regular" regime applies to everyone else. Both regimes have a CIT rate of 35 percent, but the shareholders of IPCs are entitled to rebates of almost all of the corporate taxes paid by the company, if all the profits are distributed as dividends and other conditions are met.

xx FIAS has analyzed the effective tax burdens under these two tax regimes for five kinds of investment:

- A new hotel
- A hotel expansion
- A hotel renovation
- An oil refinery expansion
- A small service business

xxi The results of the analysis contain a few surprises.

xxii The burden of the CIT itself is low – even without tax holidays. The potential burden of Aruba's high statutory corporate income tax rate is greatly reduced by the highly accelerated depreciation rules and very generous investment allowances available under the regular regime. These provisions reduce the effective tax burden on capital income to levels that range between -14 and –1 percent, for the five kinds of investment that we have analyzed. If withholding and personal income taxes on shareholders are included, assuming moderately low rates that would be typical of foreign investors, or domestic investors who manage to avoid Aruba's very high PIT rates, these effective tax burdens rise to the range of -3 to +9 percent. These low burdens are for new investments, and do not include any of the tax holidays that are supposedly unavailable since the new fiscal policy instituted at the beginning of 2003.

xxiii This means that considering only the CIT and withholding and PIT for foreign investors, these five investments would have a tax burden of no more than 10 percent; most of them considerably less. The loss of the tax holidays has thus been relatively unimportant to overall corporate tax burdens, because of the generous depreciation rules and investment allowances which remain available under the regular income tax regime.

xxiv However, this is not the whole story. The tax holidays included exemption from import taxes, which under the present system are payable by both IPCs and other companies. Taking indirect taxes into effect in the numerical analysis, the effective tax burdens go up to 12 to 32 percent. Adding property taxes and the hotel occupancy tax (the latter of course applies only to hotels and is likely to be shifted forward to consumers to some extent), the all-inclusive effective tax rates for our five kinds of investment rise to the range of 12 to 44 percent. So the effective tax burden of all business taxes is not low, and the main contributor to this burden is import duties. Moreover, the range of effective tax rates is quite large, implying a significant misallocation of capital across competing uses; in particular, investment in a refinery expansion, which is exempt from import taxes other than those applied to furniture, is especially tax-favored.

xxv The second surprise is that the effective tax burdens for companies that qualify for the IPC regime are not lower – in fact are virtually identical to the burdens under the regular regime. This result may not be so surprising once we have heard the first result, because IPC companies are liable for the indirect and other taxes, just as are companies under the regular regime. Since it is these taxes that create most of the tax burden, IPC status is essentially irrelevant – at least from the viewpoint of effective tax burdens.

xxvi There are other problems and issues with the IPC scheme. Some of the main ones are:

- Because the IPC regime is targeted only to certain types of firms, it to some extent puts the government of Aruba in the position of choosing "winners and losers." The "losers" here include small fledgling enterprises that are likely to be among the important agents of diversification in Aruba, and that are not likely to qualify for IPC status. Nor are they likely to be able to afford the lawyers and accountants needed for the administrative procedures required to attain and take full advantage of IPC status.

- The requirement that an IPC must comply with all of the stated requirements each year increases uncertainty for an investor who may fear that his business may qualify for IPC status for one or more years, only to subsequently be denied such status. Investors hate uncertainty.

- The hope that the full amount of the 35 percent CIT paid by an IPC would be creditable against US tax liability has been analyzed by experts. FIAS has not had access to their opinion. We find such a generous decision by the American Internal Revenue Service to be unlikely, for fairly straightforward reasons that are explained in the main report.

xxvii Thus it seems that the IPC regime is neither necessary nor sufficient to attract new investments. In fact, the IPC was not designed to do this job; it was a response to money-laundering and tax avoidance concerns and was fashioned mostly with offshore financial investments in mind. As of last December, there wasn't much to show it being successful in that – although it may have been a bit soon after the regulations were issued to be sure. The FIAS team found hints that one of its developing uses may be to grant continuing benefits to mature investments whose tax holidays are expiring; if this is happening, FIAS would recommend a very cold and hard look at the practice.

xxviii Personal income tax: The personal income tax has very high marginal rates, going up to 62 percent. This high rate, even more than the 35 percent CIT rate, is very unusual in the region and around the world. It is particularly questionable for Aruba, which (a) has a small local market and no natural resources, and thus must attract skilled labor and entrepreneurs, as well as capital, that can easily locate elsewhere; and (b) has no serious unemployment problems, but is seeking to attract higher-value services that rely heavily on medium- to high-skilled employees and entrepreneurs. Such people are just as mobile as capital, and a high tax rate may well send them elsewhere. The high PIT is clearly an obstacle to diversification.

xxix Import duties: The structure of Aruba's import duties looks like an almost random assortment of rates resulting from various decisions, many of which were made long ago under very different circumstances and for reasons that no longer exist.. One striking example is the 22 percent duty on furniture; this item is important for investment in hotels, and would be for investments in activities such as schools and health care facilities that are among the best targets for diversification in Aruba. Within the hotel sector, this tariff is an especially heavy burden for renovating and upgrading hotels, which is a major goal of the Government. Apparently this high tariff on furniture is a holdover from the Netherlands Antilles duty schedule, where it was set to protect a domestic furniture manufacturing industry on Curaçao.

xxx The anomalous and onerous aspects of the import duty schedule have been largely bypassed in the past by the tax holidays offered to hotels; these holidays included exemption from import duties. This regime, however, no longer exists. The entire schedule of import duties in Aruba cries out for review and rationalization; it is one place where reform can almost certainly be a win-win situation, since it can be made simpler to comply with and to administer, more friendly to investment, and at little or no cost in terms of revenue loss. (The value of import taxes collected has been averaging only 8 percent of the value of merchandise imports; a rationalized tariff schedule with no holidays or exemptions could easily collect that amount.)

xxxi Other indirect taxes: There is no VAT or general sales tax. This immediately raises the possibility of enacting a VAT or other general tax on consumption, which is completely appropriate to a small open economy. A VAT or other general tax on consumption could be of major help in solving the structural fiscal deficit, and at the same time could compensate for any small revenue losses in the short run that might (or might not) be entailed by reforms of the CIT, PIT, and import duties. Expenditure control would also be important in dealing with the fiscal problem.

## Recommendations for Tax Reform

xxxii Customs duties: The place to begin business tax reform is with import duties; it is easy to design and easy to administer. Rationalization would simplify the work of the customs administration), and need not reduce revenues at all. The entire schedule should be rationalized, moving to a schedule with fewer rates, with very low rates for capital and intermediate goods, and somewhat higher rates for final consumption goods. Special attention should be paid to ensure that items important in activities such as hotel upgrading and refurbishing, educational and health-care institutions, and other top diversification possibilities are not saddled with duties that are counter-productively high. The METR model calculates that such a reform, leaving everything else unchanged and omitting the impact of the hotel occupancy tax, would result in effective tax burdens in the 17-21 percent range on the five model investment cases. This alone would be a big improvement, and provide important support for diversification in some sectors.

xxxiii The personal income tax: This is the other high priority for tax reform. The main problem with the PIT is the very high marginal tax rates, going up to 62 percent. In Aruba's small open economy, entrepreneurs and high-skilled people are highly mobile – whether they be current residents of the island, citizens living abroad, or skilled foreigners, who could be crucial to many of the most promising diversification opportunities. The high rates of personal tax create a strong disincentive for such skilled individuals to seek to work in Aruba, and for companies to employ them.

xxxiv If Aruba's development goals were just to add more hotels, the existing personal income tax could perhaps remain untouched. But to succeed in diversifying the economy, just a glance at the likely opportunities described above and in Chapter III of the main report immediately shows that these high PIT rates may well be very significant obstacles.

xxxv The standard reform prescription, which would work for Aruba, would be to expand the base of the personal income tax and then lower rates, with a maximum rate in the range of 30-40 percent. Any revenue loss can be balanced by a combination of broadening the personal income tax base, and/or by revenues from the introduction of a value-added tax.

xxxvi The tax on foreign exchange transactions: The 1.3 percent tax on outward foreign exchange transactions is a nuisance tax that sends a negative signal to investors. This kind of tax has become increasingly popular in the region and many parts of Latin America. To FIAS, the repeal of this tax presents a good opportunity for Aruba to send a positive signal to investors, and differentiate it from some of its nearby competitors, at little cost to its Treasury.

xxxvii Corporate tax reform: The IPC regime: While this regime has not been in effect long enough to be sure, FIAS expects little or no benefit from this scheme in terms of making Aruba attractive for investment, and sees many problems and questions associated with it. FIAS recommends that as time goes on and more experience is gained with the IPC regime, the Government study it carefully. Using it to renew tax holidays for established hotels that have already enjoyed them should be avoided.

xxxviii The regular corporate tax regime: The reforms just described could be enough to leave the regular CIT regime as is. However, this regime has a number of weaknesses, of which the three most important ones are (a) the overall effective tax burden would still be a bit on the high side; (b) there are problems inherent in any scheme featuring a high statutory rate with compensating holidays, exemptions, and generous write-offs such as Aruba's investment tax allowances and accelerated depreciation; and (c) effective tax rates differ significantly across assets and across alternative investments, thus distorting investment decisions. Additionally, a high statutory rate may send a negative signal to investors that results in some of them not looking more deeply into the other parameters of the regime.

xxxix The reasons that such regimes are being replaced, in more and more places around the world, include:

- The moderately high effective tax burden that would remain, even after the other reforms, will create pressure for more incentives. Restoration of tax holidays will be at or near the top of the lobbyists' lists. Aruba has plenty of experience in this matter, and problems encountered with holidays all over the world are discussed in the main report.

- A high statutory tax rate creates incentives for multinationals to use transfer pricing and other schemes to shift taxable income away from the high rate country. This can dramatically reduce revenues.

- A high statutory rate may create the perception in the international business community of an unfavorable tax regime. Even if the effects of the high rate are mitigated by other provisions of the tax code, a country with a high rate may fail to pass the first screening that decision-makers typically use when they make up their "long list" of potential investment sites.

xl For these reasons, and others discussed more fully in the main report, FIAS recommends a lower statutory CIT rate in Aruba, coupled with eliminating or reducing the size of the investment tax allowances. A few options are discussed in the main report; one possibility combines reducing the statutory CIT rate to 20 percent, eliminating the investment allowances, and increasing the first-year accelerated depreciation deduction from 33 to 50 percent. Such a package would simplify the CIT, reduce the biases among assets and therefore among sectors that are currently magnified by the tax allowances, and reduce the effective tax burden to a competitive level. Many other variants are possible; a final decision would need to consider the revenue effects of the different possibilities, as well as comparing the METRs to those offered by other countries that may be competing for the same kinds of investments. In the absence of such analysis, FIAS's final word on this issue is to recall the basics: small countries cannot, and generally do not try, to impose high taxes on mobile capital or skilled labor. Business taxes need not be zero but they must not be so high as to impede needed investment; government revenues in small countries must depend relatively heavily on indirect consumption-based taxes such as a VAT.

xli VAT: A broad-based low-rate value added tax (VAT), as recommended repeatedly by the IMF, would be the best way to offset any revenue losses that arise from reform of the existing system as well as to reduce the current structural deficit. A VAT is especially appropriate in a small open economy like that of Aruba,. Since the nation does not now have any such tax, Aruba could draw on the large body of experience elsewhere to design an outstanding VAT. Coupled with the other reforms outlined above, the enactment of a well-structured VAT would leave Aruba with an excellent tax system that would be highly conducive to investment, including investments that would diversify the economy.

xlii Planning and implementing the reform: Any tax reform, especially the large menu of reforms recommended here, would best be planned as one coordinated package, considering revenue as well as investment incentive impacts, and the other principles of good tax systems. However, the package could be put into effect in steps that stretch over a few years in the future, if there were administrative or other reasons for doing so.

## Investment Promotion

xliii To diversify the economy into other activities such as the ones discussed here, Aruba must engage in investment promotion – selling the island as a place to invest. Aruba has little or no reputation in these new activities and is probably not on many (or any) investors' maps of places that warrant deeper investigation as possible investment sites. Even to stimulate domestic investment, a good promotion agency can generate and/or facilitate activity, and be a catalyst to help make investments happen.

xliv There is now no single agency or department in Aruba that is fully devoted to promoting private sector investment. Whatever limited efforts that are being carried out in that regard are fragmented at best, and undertaken on an uncoordinated, *ad hoc*, basis by various private sector institutions and government departments. The Department of Economic Affairs, Commerce and Industry is currently the government's *de facto* investment promotion arm. The three officers engaged in these activities, which they undertake in addition to other duties, are knowledgeable and committed to investment promotion, but they have essentially no budget and other tasks compete for their time; they cannot do enough. Aruba needs more.

xlv Investment promotion is classically viewed as a mix of four kinds of activities:

- Image building: general advertising, missions and shows, data provision on web sites, in brochures, and elsewhere, and similar activities that are designed to improve general awareness of the existence of a good investment climate in the country.

- Investment generation: identifying economic activities on which to focus efforts; within these sectors, identifying companies and home countries to work with; some highly focused advertising or similar public relations work in specialized journals or marketplaces; direct contact with executives of target companies to inform them about the country and persuade them to take a deeper look at investment possibilities there.

- Investor facilitation: assisting potential investors before they decide to invest, after the decision but while they are implementing the investment, and after the company is up and running. This involves getting them information that they need, when they need it, giving logistical support while they are making their decision, and particularly helping them to deal with the various permitting, licensing, and other regulatory agencies of the government.

- Policy advocacy: Investment promotion personnel are superbly placed to learn how investors see the strengths and weaknesses of the country as an investment site; to analyze that information and to provide officials of their government with timely, valid suggestions for priority actions that would improve the attractiveness of the country to potential investors.

## Recommendation for Investment Promotion

Strategy

xlvi For a new investment promotion unit in Aruba, FIAS recommends an initial concentration on investment generation and on investor facilitation. Policy advocacy should follow. Image building as traditionally practiced is too broad to be cost-effective for Aruba, which already has an excellent general image anyway; what is needed is a much more focused campaign to sell the country as a good site to investors in targeted activities.

## Structure of a promotion unit for Aruba

xlvii IPAs worldwide have quite different external structures, being autonomous, within Ministries, within an Office of the President, etc.; their funding sources range among the government budget, aid donors, private sector businesses and/or associations, and sometimes others. Experience suggests that the structure most likely to lead to success is an autonomous agency, with its own by-laws and operating procedures (outside the civil service), reporting to a mixed public-private sector Board of Directors. However, there have been successful agencies with various different external structures.

xlviii FIAS does not recommend that Aruba try now to set up an autonomous, stand-alone agency. Given Aruba's small size, limited range of sectors to promote, budget constraints, and recent history and existing skills, an appropriate start could be to establish the investment promotion agency as a "lean and mean" department within the Ministry of Finance and Economic Affairs. It might be named the Department of

Investment Promotion or DIP. It should report to the Minister and have its own dedicated staff, offices, budget and responsibilities.

xlix FIAS further recommends the establishment of an Advisory Committee made up of prominent and active business and government people who are knowledgeable about doing business in Aruba. The Committee, both as a body and through individual members, should actively advise the DIP and the Minister on the new department's policy agenda and operational priorities. The Committee should be a champion of the Department both within the Government and with the business community and the nation as a whole.

l Starting with about three professional and two support staff, a budget of approximately US$1 million per year for the first three years is a good minimum level. The Department must have sufficient budget not only to pay its own staff and normal operating expenses, but to take trips, engage consultants, participate in selected events, etc. There is no surer way to make an investment promotion agency fail than to limit its budget to its own staff and normal operating expenses.

li The main report contains considerably more detail about the structure and functions of the proposed Department. One last essential point here: <u>The most important ingredient of all – the *sine qua non*, the absolutely indispensable requirement for the success of an investment promotion agency – is a good investment climate</u>. The agency cannot do more than speed up the action of the market. It cannot persuade investors to come where they face too many difficulties, or too much risk and uncertainty, or too hostile a regulatory or tax climate. The country must offer real economic advantages, and a business climate that is conducive to investment, operation, and expansion of private businesses. Only then can a promotion agency inform and persuade potential investors to come to the country.

## Education and Training

lii FIAS was not asked to analyze this topic, and indeed has no particular expertise in this important area. A few remarks nevertheless: There are probably many ways in which a stronger education and training system could pay off to facilitate achievement of the diversification goals. For example: a new Faculty devoted to training for the hospitality industry is being created at Aruba University; if done well this could be an excellent example of building on an existing cluster to create something that both strengthens Aruba's competitive edge in that cluster and could lead to export of educational services as the Faculty grows and could train students from other countries in the future. Education focused on development of entrepreneurship, and small business management, might also be very useful. Success in today's increasingly skill-based economy hinges on the development of advanced skills, especially if Aruba is to succeed in diversifying its economy in areas with predominantly high-wage jobs. Ultimately, sustainable development is about growth in labor productivity. This topic merits serious attention and careful action.

## Regulation and Administrative Barriers

liii This topic was originally to have been investigated, broadly and in detail, as part of the work for this report, but was set aside at the Government's request. The FIAS team found several areas in which it seems likely that changes in regulation, some outright de-regulation, and streamlining of permitting procedures would have important pay-offs:

- Restrictions on work permits for spouses of expatriates and other non-citizens with good skills and entrepreneurial energies. Diversification into high-quality activities needs as many of this kind of person as possible; their living and working in Aruba should be welcomed rather than restricted.

- Restrictions on disciplining and/or firing unsatisfactory workers. In today's highly competitive, globalized world, not only the entire economy, but even the workers concerned, might be better off if labor market rules were a bit less lenient and provided a bit more discipline for workers.

- Long delays in obtaining immigration and work permits. Processes for this and for the next item should be streamlined.

- Long delays in obtaining some business permits, especially land access and construction

liv However, FIAS has concluded that the Government's decision not to do the survey was a good one. These problems are rather specific and focused, and well-known in Aruba. We don't see any great need for a general, broad survey to verify that these are indeed the most important problems or to quantify the rank in terms of importance of each different problem. The more effective way to proceed would be to deal specifically and directly with each of these four problem areas, in a focused manner, without spending the time and money that would be needed for a broader study.

## In Conclusion

lv Aruba is blessed with more than just a good climate. It has an able population, a tradition of good government, a stable and predictable business environment, and the excellent quality of life that these create. Its present prosperity attests to these blessings. It has inherent limitations as a small island with few natural resources, and a further limitation on competitiveness in low-value-added activities – which is created by the high standard of living resulting from its success so far. With a few important adjustments, Aruba can and should continue to grow in ways that preserve and enhance its quality of life and reduce the risks, to some degree, of its dependence on its very successful tourism sector.

# CHAPTER I

## INTRODUCTION

1. In 2004 the Government of Aruba began discussions with FIAS, requesting an analysis of the business climate and possibilities of future growth in Aruba. Although Aruba is a much more developed society than FIAS would normally assist, it was agreed after some discussion that FIAS would work with the Government to define the scope of possible assistance. This preliminary work produced an agreement with the following main substantive elements:

- The major subject of the analysis and recommendations would be an exploration of future growth in Aruba's economy through diversification.

- FIAS would look at the general feasibility of a diversification strategy, analyzing Aruba's fixed competitive strong points and limitations, and identifying and analyzing what economic activities such diversification efforts might target. FIAS would also perform a diagnostic analysis of the legal, administrative, and policy environment, in order to identify any important elements that needed to be improved, to increase the likelihood of success of such a diversification strategy.

- The Government tentatively identified both diversification of the tourist sector, and activities outside the sector, as its feasible goals; within the tourist sector it identified upgrading and/or expansion of existing hotels and other facilities as a priority equal to or greater than increasing the amount of such capacity.

- The Government and FIAS initially and tentatively identified three high-priority topics on which to focus:

    ♦ Taxation

    ♦ Red tape, regulation, and administrative constraints on doing business

    ♦ Investment promotion: both institutional aspects of how to set it up, and strategic aspects of how to do it.

  However, before the field work began the Government requested FIAS not to go ahead with the "investment climate survey" that had been originally proposed to gather data on red tape, regulation, and administrative constraints. During its field work, the FIAS team found that these problems are not widespread, and that the more important ones are in only a few particular areas. Thus, a broad survey does not seem to be needed.

Finally, it was agreed that the FIAS work would probably not provide all necessary details on all these topics, but would, at a minimum, identify the important points, the directions to move, and a strategy. Further work might be necessary to formulate operational recommendations.

2. Having done this work, the overall outlines of FIAS conclusions are as follows:

- The Government's focus on diversification, to achieve sustainable growth and to reduce the risks caused by Aruba's great dependence on tourism, is both desirable and feasible. Diversification is the right strategy for future growth in Aruba, and it is feasible in spite of the nation's strong advantages and great successes in tourism, and its small size and lack of natural resources.

- All three policy areas that were identified before the work began (taxation, regulation, and investment promotion) are indeed areas where the Government needs to take action. An apparent fourth is strengthening the education and training of the people of Aruba.

- FIAS was able to formulate moderately detailed recommendations for tax reform, and very detailed recommendations for investment promotion. The main problems under regulation and administrative barriers have been identified, but in-depth analysis has not been done. Education and training, on which FIAS has no special expertise, has been identified as also needing strengthening, but we can not go further on this topic than the few tentative remarks presented in this report.

3. The rest of this report is divided into two parts. The first deals with what a diversification strategy might be. The second contains analysis and recommendations about policy changes needed to implement such a strategy, with separate chapters on tax reform and on investment promotion, as well as some brief remarks on regulations/administrative barriers and on education/training.

# PART I

## A DIVERSIFICATION STRATEGY FOR SUSTAINABLE GROWTH AND REDUCTION OF RISK

# CHAPTER II

# DIVERSIFICATION FOR ARUBA: SOME BASICS

## A. Why Diversification?

4. Aruba is interested in diversification to reduce risks, and to create high-quality employment and income opportunities, by diversifying the nation's economic base. The goals are three-fold: to reduce risks in the face of threats to income from tourism, to diversify the job base to create opportunities for all the people of Aruba, and to continue to grow in a high-quality, sustainable way.[1]

5. Risk reduction: In any nation, the economic engine that is tourism faces a number of potential threats, and Aruba is no exception. With the industry accounting for an estimated 38 percent of GDP and 35 percent of employment, Aruba's very success in this highly competitive sector exposes it to great risks.[2] One concern is a possible downturn in disposable income from tourists in the major source market, in this case the United States which is the source of over 70 percent of all overnight tourism. A second threat is the emergence of a new, hot and attractive competing tourism destination. The probable opening of Cuba for legal U.S. travel at some time in the future is an example of such potential new competition. And a third threat is a prolonged, sudden drop in tourism in tourism due to terrorist activity, either in source countries, or in the Caribbean region, either of which could dampen demand. The financial difficulties of the U.S. airlines, responsible for much of the airlift to Aruba, have also spurred concerns about a sudden, even if only temporary, disruption.

6. None of these risks are far-fetched at this time. Taking a longer view, even a successful diversification of the economy will (a) still leave tourism as the major activity and (b) not show significant results in only a few years – during which time the threats may fade and/or change. Diversification does not promise some magical major transformation, or rapid and great reduction of risk. But if pursued wisely, diversification should be a win-win proposition: it should reduce risk to some extent, without any cost in terms of overall income growth in Aruba. It can only do this if the main engine for such

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[1] The IMF mission in January 2005 stressed the stagnation of labor productivity in Aruba during recent years, and the need to diversify the economy into higher-productivity activities as a virtual *sine qua non* of increasing productivity in the future.

[2] Estimates by the Economist Intelligence Unit, Aruba Country Profile 2004, page 19.

diversification is to facilitate activities that market forces favor. To go against the market is to court high costs at best and failure at worst.

7. Employment and income opportunities: Pursuing smart diversification is the way for the government of Aruba not only to reduce volatility, but also to create more and better employment and business opportunities for all the people of Aruba. In countless interviews that the FIAS team had on the island, this latter goal was reiterated. Improving the business climate to diversify the job base, to encompass a broader range of activities, will create career opportunities for those now in the labor force, the unemployed, future generations who will enter the labor force, and perhaps some of the thousands of expatriates from Aruba, many well-educated and with good skills and experience, who have emigrated to Holland, the United States, and elsewhere.

8. Sustainable, high-quality growth: Aruba today is a gem. But it is a gem whose future quality is uncertain. Although FIAS was specifically asked not to study Aruba's tourism sector (because there are so many other existing studies), even casual comparison with other nations in the region, and other island economies elsewhere, suggests a small, fragile island at a tipping point. Much more cruise ship activity, with the honky-tonk ambience and congestion it seems to induce in most stopover locations, could damage the island's existing strong attraction to higher-level tourism -- and to other high-value and otherwise more desirable investments based on Aruba's tranquility and quality of life. Much more expansion of the number of hotel rooms could do the same, especially if such expansion contains much middle- or lower-level capacity. The economic forces that would inevitably lead to importing more low-wage labor have dangers pointing in the same direction. FIAS feels strongly that quality, not quantity, must be the byword of future growth – in tourism and in other sectors. Aruba is rich enough to choose this path, and too small to risk the dangers of other paths.

## B. Strengths and Limitations for Diversification

9. No economic analysis is necessary to demonstrate what the market already shows: Aruba has a strong vocation for tourism. Nor is it necessary to demonstrate the difficulties facing any diversification effort; some failures in the past few years provide cautionary examples, and the paucity of successful results even after decades is further evidence that opportunities are limited and progress may not be easy.

10. Aruba's outstanding beaches, friendly, multilingual service staff, accessible location away from hurricane-prone areas, and high level of security add up to a superior location that competes successfully at the highest levels in the tourism industry. Tourism is the nation's driving economic force, and is likely to remain so in the future even as diversification occurs, due to the existence of the factors of production just discussed. Tourism is and will continue to be the industry that generates, directly or indirectly, most of the jobs and wealth and profits in Aruba for years if not generations to come. Tourism

is what Aruba does best, a fact that is not likely to change in the near future even as other promising sectors begin to develop. Diversification is a challenging, long-term proposition.

11. Our analysis is based both on the past record and on some obvious a priori conclusions. Relevant characteristics of Aruba include: the outstanding comparative and competitive advantages of both the Caribbean region in general, and Aruba in particular, in meeting the needs and wants of international tourists; low annual rainfall that effectively eliminates most agriculture as an option; a small local labor force, a small local market, high costs for water and electricity, lack of natural resources, high labor costs relative to the region (and indeed the world) which restrict manufacturing possibilities; and a tax regime adopted in the face of the refinery shutdown of the mid-1980s that elevated the returns to investment in hotel rooms relative to investment in other sectors. And while it may not be politically correct on Aruba to say it, other places in the region, including but not limited to neighboring Curaçao, offer competing facilities for transshipment and other regional material-handling activities, free-port and duty-free zone facilities and institutions, as well as a history and many skilled practitioners in offshore finance, that must give us all pause before placing strong hopes on developing these kinds of activities in Aruba.

12. That being said, diversification is happening on Aruba -- albeit not on a scale that is considered sufficient by the public and private sector representatives interviewed in the course of this project. Entrepreneurs are branching out by investing in internet service providers and pharmaceuticals processing. They have plans to launch businesses to desalinate water for industrial uses, and pack rice and sugar for household purchase. Potential investors have approached the Chamber of Commerce to express interest in investing in sectors as diverse as wind power generation, cultivation of flowers, and graphic design. There appears to be no scarcity of ideas, or of local capital, and yet examples of diversification, particularly in the last two years, are few. To date, tourism has been so successful and profitable that entrepreneurs have not judged other more risky ventures as worthwhile, given the high opportunity cost of passing up a tourism investment. But with the right changes in policy, and an effective promotion effort, successful diversification can happen, and it can happen faster than in the past.

13. For diversification to generate the kind of society and economy that the people and government of Aruba want, diversification opportunities must meet a variety of criteria. They should:

- Rely mainly on the local labor force. They must not generate a large influx of immigration, especially of low-skilled workers, because of the pressures created by immigration on school and health expenditures as well as the shortage of land for housing.

- To the extent possible, generate jobs paying at or above current average wages. They must generate high-quality, desirable jobs.

- Fit well with tourism and other emerging sectors – enhance, or at a minimum not detract from, Aruba's advantages in tourism.

- Suit, not strain, the island's carrying capacity for workers, visitors, residents, water usage, waste disposal capacity, land, and other scarce resources.

- Serve markets in which international demand is growing. While the purchasing power of the people of Aruba is high by regional standards, and a few of the opportunities serve local as well as international buyers, the small size of the market in Aruba means that success in international markets is crucial.

- Respond counter-cyclically to the tourism industry – if and to the extent possible. The most desirable diversification activities would ramp up when tourism drops, or remain unaffected by a decrease in tourism. These opportunities are limited; the pressures that affect tourism often also affect many other sectors. A drop in disposable income in the U.S. will reduce the demand for tourism but also the demand for professional services, manufactured products, transport services, and banking services. For this reason, diversification opportunities were also sought that would dampen the volatility in revenue.

- Be viable, profitable private sector investments. The Government needs to improve several aspects of the business climate, but beyond that should not fund or otherwise devote significant resources to projects that private investors find insufficiently profitable for themselves.

## C. Targeting and Picking Winners

14. The Government of Aruba made one very successful big bet when it gave serious financial backing to hotels, some years ago. A few of these bets, individually, turned out badly and resulted in some costs to the government – meaning, to the people of Aruba – and it may be that with hindsight the effort might have been designed somewhat more efficiently. What matters today is that it worked, producing a great success. What also matters today is to understand that this bet was the, one and only, obvious one. Subsequent bets – auto racing, the free zone, perhaps others – did not have the close match with Aruba's economic strengths and, for this and perhaps other reasons too, did not succeed.

15. There are ways in which the Government, today, must inevitably target certain sectors in designing certain actions. There are other actions, based on targeting or

picking winners that the Government should avoid like the plague. Understanding the differences is crucial, as is discussed in the following three paragraphs.

16. FIAS has concluded that Aruba needs to reform its tax system. It has also concluded that Aruba should have a small, "lean and mean" investment promotion unit with dedicated staff and a sufficient budget. Certain regulations need to be changed in order to improve the business climate, and education and training need to be strengthened. In fashioning all these changes, we start from a first approximation that they should be neutral across sectors – they should not favor any economic activities over any others. We then take one more step: because of the factors already mentioned and well-known in Aruba, diversification activities that are both feasible and desirable are highly likely to be concentrated in medium- to high-value service activities. They are highly unlikely to involve manufacturing. We therefore take special care that tax reform, investment promotion, streamlining of regulations, education and training, etc. are friendly to such medium- to high-value service activities. We further want them to be friendly to upgrading and expanding existing hotels, and in particular we want to avoid any bias in favor of new, greenfield hotels, relative to expansions and upgrading.

17. The investment promotion unit, if and when it comes into being, will have to go further than this. Because its resources will be severely limited, it will have to target sectors and host countries that are most likely to yield investments that Aruba wants and that can be competitive on the island. Every investment promotion agency in the world does this; their limited resources mean that they inevitably must focus, and so they try to focus in an intelligent way.

18. But this is as far as such targeting should go. We strongly advise against the Government investing its own resources (which include not only grants, but cheap access to land, loan guarantees, etc. etc.) to promote any of these activities. And the investment promotion agency must, as time goes on, actively test its first list of targets against responses from investors. It must listen for what the market tells it, and change or at least refine its targeting according to its observations of what works. It must follow one of the maxims of successful investment promotion: "If it moves, push it."

19. There will be exceptions to the general conclusions presented here, and to the list of the promotion agency. Manufacturing of aloe products is a wonderful instance of how Aruba can compete in a manufacturing industry based on the island's natural resources – even though both characteristics seem, for the most part, to be ruled out in high-wage, arid Aruba. There will, with good policies and some entrepreneurial energy and some luck, be others. The business climate must be open for such unforeseen opportunities, and must not discriminate against them.

# CHAPTER III

# WHAT TO PROMOTE: DIVERSIFICATION OPPORTUNITIES

## A. Methods

20. FIAS used a combination of several analytical tools to identify the most promising, appropriate diversification opportunities for Aruba: analysis of comparative and competitive advantages, review of diversification options pursued by other similar economies, assessment of new industries that are logical offshoots of Aruba's existing industries, particularly tourism, and identification of Aruba's "emerging clusters." The comparative and competitive advantages, discussed in the previous section, were compiled from sources such as the Economist Intelligence Unit and the World Bank, and updated and verified in interviews. To identify options pursued by other nations, FIAS looked at the Caribbean economies, and reviewed United Nations research on sustainable development of small island states. The FIAS team interviewed a large number of business and government leaders in Aruba to identify new directions and emerging sub-sectors of existing industries.

21. Identification of emerging clusters, mentioned above, is a new development tool that is being honed and implemented worldwide by governments, public/private partnerships, and donor agencies. The cluster methodology is built on Michael Porter's pathbreaking work on competitiveness, and incorporates innovations in response to client needs for effective investment attraction programs that don't break the bank by providing excessive incentives.

22. A cluster is essentially a geographic concentration of companies in a given industry, together with their suppliers, service providers, and support institutions. Clusters develop over decades in a four-phase life cycle, beginning with isolated firms and ending with developed clusters consisting of many firms and a variety of service providers and support institutions that together comprise a world-class, thriving industry. Successful, fully developed clusters have the human and institutional resources to adapt to the inevitable changes in both technology and in consumer demands – they don't die if the appeal of their products fades, or if their technology is threatened; they change. The best of them are the leaders in such changes.

23. Aruba's tourism industry is a developed cluster – the only one in this small economy. Emerging clusters, at earlier stages in the life cycle, are small industry subsectors, perhaps comprised of just a handful of firms. These firms are considering or beginning to hire or invest; they are identifying new markets and innovating. Often, new business start-ups are under development in emerging clusters. Emerging clusters can be viewed as the seeds of successful industries. FIAS attempted to begin to answer the question, "What are Aruba's emerging clusters?" Many of the team's interviews in Aruba were dedicated to beginning to map Aruba's incipient clusters, seeking evidence of growth and development in new industries and new sub-sectors of existing industries.

## B. Findings: Three Categories of Possibilities

24. Using the approach described above, and comparing possibilities to the criteria outlined, FIAS identified quite a few diversification options. Upon analysis, they have been prioritized into three categories:

- High potential opportunities: Those with the greatest potential for diversifying the economy of Aruba;
- Other potential opportunities: Opportunities with significant potential but on a smaller scale, or more doubtful; and
- Interesting but problematical: Ideas with some merit but facing significant trade-offs or obstacles.

25. Many of these are not new ideas. People on Aruba have been thinking about diversification for decades, and it is no surprise that most of the good ideas have already surfaced -- as have some not-so-good ones! FIAS sees the role of this part of the report as helping to focus on the ideas that seem to have the most merit, and to set the context for the government actions recommended in the subsequent chapters. And: as just mentioned, and important enough to repeat: These results may not – almost certainly do not – include all the opportunities that exist. Promotion efforts should concentrate on the most likely possibilities, but the system should be open for others.

### *1. High-Potential Opportunities*

26. High potential opportunities are most likely to make a contribution toward diversifying the economy in the short to medium term. They should be the focus of initial investment promotion efforts. They include:

- Educational Opportunities:
  - ♦ Research and Study Abroad Programs
  - ♦ Primary and Secondary Boarding Schools
  - ♦ Private Pre-schools, K-12 Schools, and Professional Development Institutes
  - ♦ Additional Medical Schools
- Health Care Opportunities:
  - ♦ Rehabilitation Facilities
  - ♦ Holistic Health Care and Education
  - ♦ Cosmetic Surgery Procedures
  - ♦ Diagnostic Testing

- ♦ Other Health Care Opportunities

- Tourism Diversification Opportunities:

  - ♦ Broadening the Base of Tourism Source Nations
  - ♦ Developing Upscale Leisure Niches
  - ♦ Developing the Full Tourism Industry Spectrum, Including MICE ("meetings, incentive trips for employees, conventions, and events")

- Privatization of Non-essential Governmental Services:

  - ♦ E-government
  - ♦ Translation Services
  - ♦ Private Pension Funds

27. Remember that FIAS does not have, nor will the investment promotion unit we recommend have, access to any crystal balls. We are not able to predict the future. Using the best tools available to us, we have identified those sectors that appear to offer the greatest prospects for Aruba because Aruba has the comparative and competitive advantages to compete successfully and gain, maintain and enhance market share in these growing international markets. In actuality, entrepreneurs identify and act on growth opportunities independently. Some investments will succeed, and some investments will ultimately fail. That is how the private enterprise engine functions, the way it spurs innovation, growth, and diversification. Private sector growth does not stem from the coordinated actions of a centralized command structure. If that were true, wise central planning committees would often produce better outcomes than the instincts of entrepreneurs. Experience all over the world has proven otherwise. With these caveats, we propose this series of sectors as targets for investment promotion that appear to offer good prospects for Aruba.

## Education

28. <u>Research and Study Abroad Programs.</u> Providing facilities (and eventually faculty as well) for research and study abroad programs that would locate in Aruba is an educational sector growth opportunity for Aruba. In this option, Aruba would provide classroom space, research opportunities, and residential facilities for U.S., European and other students studying for a semester abroad. Study abroad programs are a growing, multimillion-dollar market. Colleges and universities can either send professors to handle the courses, or pay local institutions for the teaching services or research supervision. The foreign college also pays a per student stipend for the use of facilities, and room and board.

29. Research exchange and study by foreign students is already occurring in Aruba on a limited basis. Two Dutch universities have sent 2-4 students for periods of 3-4 months for research internships with the Department of Agriculture in the areas of tropical fish, coral reefs, and aloe. Similarly, a U.S. university sent a student for a research internship on Aruban rattlesnakes. Colegio EPI – Unit Hospitality & Tourism operates a 5-month Food and Beverage Operations Program that already hosts Caribbean students and includes internships at hotels in

Aruba. The University of Aruba is launching a Hospitality program that could draw international students. The market signals that education is an emerging cluster in Aruba, and it makes sense in view of the island's strengths and limitations.

30. Aruba offers many advantages in the educational sector, including the widespread use of English and Spanish, safety and security, and an attractive location for students and faculty. Until the University and other educational institutes develop further depth and breadth, the major opportunities are in marketing, logistics and organization, provision of facilities for classes and research, and provision of lodging for the visiting faculty and students. In this phase of diversification, new jobs would be created for educational administrators and administrative assistants. As educational offerings grow, Aruba is a prime candidate for providing faculty to teach foreign students. At that stage, new jobs would be created for professors, assistant and associate professors, educational administrators, and educational staff.

31. Aruba would benefit in many ways from the development of this educational sector. Incomes will rise from payments for lodging, research supervision, and eventually for instruction as well. High-quality jobs would be created. Visiting professors can expand course offerings. Growth in hospitality education may even ease, albeit in a small way, the pressure for greater in-migration by providing a steady stream of interns. It is complementary in both directions with tourism; tourists can provide advertising for the educational programs and the environment of Aruba, while the education program can provide advertising for tourism and, as it develops, high-level staff.

32. Primary and Secondary Boarding Schools. Another diversification opportunity is private boarding schools for primary and/or secondary school students. The target market for the school(s) would be parents seeking a high-quality, English language (and perhaps also Spanish) education for their children in a safe, secure environment that is close to home and accessible. The security concerns in Colombia, Venezuela and elsewhere in Latin America are such that many families are seeking alternate living arrangements outside of the country. Aruba meets each of the criteria of such families; and the economy is small so that it does not have to capture a large share of the market in order to be a success in Aruba. The school could also provide a day school for children of local families.

33. This option also provides many attractive linkages with the current economy. Large class size due to overcrowding in existing schools is a concern, and an additional school could reduce this pressure. The employment impact of this option is also favorable; well-paying jobs in teaching, school administration, and marketing would be created. Very little in-migration would be needed, as the economy already includes well-educated teachers. The economic impact on Aruba of such a school would include the payments for tuition and room and board from the foreign students. Just as in the case of higher education, such a school would complement tourism, in both directions, and could also complement medium- to high-level condominium development that would appeal to well-to-do parents of the students for part-time or even retirement homes.

34. Private Pre-schools, K-12 Schools, and Professional Development Institutes. Education represents both a key driver of future competitiveness, as well as a vehicle for diversification. Aruba's greatest natural resource, beyond sun, sea and sand, is its people. Providing them with

the upgraded skills they need in a global economy is therefore both a challenge and an opportunity. Private business opportunities include additional preschools, schools, and life-long learning and professional development courses. The new Faculty devoted to the Hospitality Industry at the University of Aruba is an example of this kind of initiative. Entrepreneurial and other training for small business development could be another. Further analysis of training needs for Aruba as a whole could point to other priority fields

35. Additional Medical Schools. Medical schools are a proven diversification opportunity in the Caribbean, which boasts some 15-20 institutions serving thousands of foreign students, bringing in more than $100 million/year in tuition and room and board. They offer medical education to Caribbean students; open new careers in medical education for Caribbean professionals; provide a steady base of income for apartment owners, supermarkets, and myriad small and medium businesses serving the students; and improve medical treatment for the local population.

36. Aruba's attractiveness as a medical school location is evidenced by the fact that the All Saints University of Medicine gained approval from the Ministry of Health in late 2004, and is scheduled to open its doors in January 2005. Beginning with some 20-60 students, planned to grow to over 100 students in May; according to the school administrator the school, when fully operational in 2008-2010, could have an enrollment of 1000, each paying an estimated $122,300 in tuition, board, lodging, books, and travel over the five-year degree. These enrollment estimates made by All Saints are optimistic when compared with growth rates of other Caribbean medical schools, but the opportunity is important.

37. Aruba's advantages as a medical school location include the widespread use of English, safety and security, ease of air travel, and proof of concept once All Saints is further established. Several Caribbean islands have more than one medical school, and Aruba is well positioned to attract continued growth in this sector that meets all the criteria for sustainable, high-quality diversification of the economy. Market demand exists to spur growth: it is estimated than more than 40,000 students are unsuccessful in gaining admission to U.S. and Canadian medical schools, and approximately 10,000 of these have both the qualifications and the financial resources to seek a medical education abroad.

38. In addition to focusing on attracting an additional medical school, Aruba should also seek to attract related medical institutions such as a nursing school, dental school, veterinary school, and similar facilities, which can be drawn to Aruba for the same set of comparative and competitive advantages and which could form a resilient, growing cluster that would complement tourism in both directions and improve the quality of life for the people of Aruba.

## Health Care

39. A variety of health care opportunities serving both foreigners and the local population offer good prospects for diversification.

40. Medical schools offer good synergies with other sectors of the economy of Aruba. They will increase the supply of trained medical personnel, thus improving care in local health care

facilities for both residents and tourists alike. They will provide stable income to owners of apartments, condominiums, and rooms for rent, as well as supermarkets and small businesses. They boost the offerings of the educational establishment of Aruba in the global market, increasing its visibility and diversity.

41. Initially, professors at All Saints will come primarily from Canada, but the University foresees hiring a professor from Aruba for the pre-medical training. Over time as the sector grows, jobs will be created for professors, assistant and associate professors, laboratory technicians, educational administrators, and administrative assistants -- desirable jobs for the people of Aruba.

42. Rehabilitation Facilities. Current overcrowding at the hospital underscores the need for investment in private sector rehabilitation facilities for short- and long-term convalescence and therapy for residents of Aruba. Patients are treated at the hospital, incurring high costs, who could receive better care at lower cost in a smaller, more specialized facility with a lower-cost staffing mix more suitable for their needs. Small rehabilitation and convalescence facilities would improve patient care and outcomes, lower public health care expenditures, and represent profitable opportunities for private sector investment.

43. Opportunities also exist for attracting foreign patients to Aruba for a variety of treatments, particularly for holistic healthcare, simple cosmetic procedures, and diagnostic testing regimes for well patients. Aruba is not currently well positioned to compete globally for medical tourism involving complex surgeries, however.

44. Holistic Health Care and Education. Holistic health care is a burgeoning, multi-billion dollar market in the United States and Europe. As so-called "western" medicine and alternative medicine and wellness increasingly commingle, patients seek a variety of non-invasive treatments to enhance their well-being and battle illnesses. Examples include yoga, meditation, spa services, herbal treatments such as aloe, hydrotherapy, aromatherapy, homeopathy, magnet therapy, and a host of others. The alternative medicine market in the U.S. is estimated at $4.5 billion annually and is growing.

45. Some of these services already exist in Aruba, such as yoga, spas, and natural healing centers, and they serve both the local market and foreign visitors. This emerging cluster is evidence that there is demand in Aruba for holistic healthcare services, and the large and growing foreign markets support additional growth and diversification.

46. In addition to offering holistic healthcare services, Aruba has many of the prerequisites to offer holistic health education and training, either short courses of a few hours or few days, or longer courses for either patients or practitioners lasting for a week or two. This diversification option links both the health care and the educational sectors, and its success would come from the comparative and competitive advantages that Aruba offers in both sectors. Again, it is complementary with tourism and meets all the criteria for sustainable diversified growth.

47. Cosmetic Surgery Procedures. Cosmetic surgery is another booming industry worldwide. As the societal taboos on the procedures fade, a rising number of patients, over a broad age range and of both sexes, seek treatment. An aging population also contributes to market growth. The

U.S. cosmetic surgery market is estimated at $1 billion, and is expected to grow at approximately 11 percent annually over the next several years. Importantly for Aruba, non-surgical procedures such as injections, laser treatments, and dermabrasion will lead this growth. Aruba offers a better environment for procedures such as these than it does for complex surgeries at this time.

48. Aruba offers competitive advantages in this field: Clinics already offer a variety of procedures, the predominance of English facilitates communication with healthcare professionals and Spanish may facilitate some diversification to Latin American markets, easy air access and attractive surroundings ease the logistics and allow patients a cover story for their stay if they so choose.

49. Diagnostic Testing. A third market trend which offers diversification opportunities for Aruba is the rising interest in extensive diagnostic testing, including CAT scans, assessments of cardiovascular disease risk, genetic testing, and similar noninvasive tests, among well patients. For example, the Aruba Heart Institute offers diagnostic cardiac catheterization procedures, among other services and research activities. Improved technology permits doctors to detect diseases earlier, allowing earlier diagnosis, intervention and treatment. Typically, these tests are not covered by third-party insurance coverage, thus patients can seek the tests overseas without losing valuable insurance benefits. To the FIAS team's knowledge, much of this specialized equipment is not yet available in Aruba, thus this sector presents an opportunity for diversification.

50. Foreigners seeking holistic healthcare, cosmetic procedures, and well-patient diagnostics will range along a continuum of tourists seeking just a few hours of such care, to patients coming to Aruba solely for these treatments. Thus, there is a clear linkage between this sector and the tourist sector, which would provide rooms, meals, transportation and entertainment for the patients. The sector also offers synergies with the mainstream healthcare industry, broadening the range of services it offers, with the medical education sector, increasing the supply of potential students.

51. Other Health Care Opportunities. Two other diversification options are weight-loss programs and detoxification programs. Demand for both types of facilities is growing in both the US and Europe. Each would involve specialized facilities with skilled staff, offering programs to foreign visitors over a period of a few weeks to a few months. It would be important to get the views of Aruba's wider tourism community, to assure such new activities would pose no important adverse effect on Aruba's international image.

52. Job prospects in the health care sectors will include doctors, nurses, medical technicians, therapists, medical specialists, administrators, marketers, and administrative assistants. Some expatriates will be needed initially and periodically to bring new therapies and technologies, which will be adopted locally, but no extensive immigration is foreseen and the immigration that would occur would be concentrated in medium- and high-skilled professionals.

**53.** In health care, as in education, it will be crucial for Aruba to view the sector both as a business in which the island can succeed to earn money and create jobs by serving international and local markets for profit, and also as contributing to the care of the people of Aruba. There need be no conflict between these two goals; indeed there are many complementarities that can be created and exploited. It would be tragic to miss these opportunities by viewing private, for-profit health care as in some way antagonistic or inconsistent with a good health care system for the people of Aruba. Creative leadership can develop and exploit the complementarities with a win-win, positive-sum approach.

## Linkages Among Education, Health Care, and Tourism.

54. Both the education and health care sectors have begun to develop as offshoots of tourism, and with additional investment will mature into independent sectors in their own right, with continued links to tourism. The tourism industry is spurring their initial development. For example, presently leisure tourists purchase a few hours of spa care. With the development of the health care sector, some additional visitors will come principally for treatment. In education, current courses have a tourism focus, such as a two-week course for scuba trainers, or hospitality training. With additional investment in the sector, there can be a broader range of course content. The new markets will reduce the ups and downs of leisure tourism by creating among consumers a unique reason for coming specifically to Aruba, essentially "tying" the consumers to Aruba and strengthening their commitment to make the planned expenditure.

55. This triad of education, health care and tourism diversification (see below) should be the first priority for promotion by the new investment promotion department, and special care should be taken that all aspects of the business environment are welcoming for such investments. As we shall see, this would require important reforms in the personal income tax, in other business taxes, in immigration and work permits for expatriates, and in other labor market regulation as well.

## Tourism Diversification Opportunities

56. Clearly no discussion of diversification of Aruba's economic base would be complete without examining alternatives for broadening the island's preeminent industry, tourism. Reducing volatility, broadening the employment base through the creation of new careers, and weathering a downturn in a given market by rapidly generating revenue from other markets, are valuable to the economy, people, and government of Aruba whether they come from tourism or from another sector. Strengthening the robustness of the tourism sector can contribute significantly to Aruba's goals. Given the large size of tourism relative to the rest of the economy, near-term growth in revenue and creation of new, high-quality jobs may well be easiest in this sector.

57. In the Aruban context, the goal of tourism diversification is not growth in tourist volume but growth in revenue and sustainability. In the views of most stakeholders and in the stated Government position, Aruba is approaching its carrying capacity not only in terms of tourists but, even more importantly, residents. Maximizing revenue/tourist and revenue/low-skilled worker means emphasizing quality over quantity, and promoting investments in other "quasi-tourism" activities that would rely less on hotel workers and more on purchasing goods and services from the economy. It means careful planning of any new construction to serve high-end niches. It means protecting the quality of the visitor experience to keep room rates high.

58. The Seroe Colorado project, accommodating thousands of new visitors in close proximity to the not-very-attractive Valero refinery as well as Aruba's prison, may be problematic in relation to each of these goals.

- The project as conceived will have large impacts on immigration, school overcrowding, housing availability, and public health care expenditures. These should be assessed objectively, in light of goals for San Nicolas and for the island as a whole. If a large number of rooms coming on-stream, perhaps offering a lower-quality experience, depress room rates significantly, both total hotel revenue and tax revenue from hotels could fall. For this and other reasons, if the project is implemented, the Government should insist on high-quality hotels and other facilities; the project should not dilute Aruba's quality level for tourism.

- There are also more basic questions. The study by Sasaki Associates may be an excellent response to the question of "how could more tourism facilities be located in San Nicolas?" but might not be the best response to a broader question such as "what would be the most effective ways to reduce poverty and social problems in San Nicolas, while preserving the attractive features of Aruba as a whole?" Of course the people of San Nicolas need economic development opportunities -- but is the Seroe Colorado resort project the best vehicle for delivering such opportunities? FIAS has not been able to study this issue in particular in Aruba, but we know very well that almost everywhere in the world, "place-oriented" programs are seldom as effective as "people-oriented" ones for improving the lives of the poor people who live in poor areas. In other words, programs to upgrade the labor force and give it better access to jobs elsewhere on the island may a better option than, or may be a necessary complementary approach to, a primary focus on creating more jobs in San Nicolas (many of which might well be filled with other people).

59. Aruba can diversify its tourism industry principally through three means:
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- Broadening the base of tourist source nations; currently over 70 percent of stay-over tourists are from the United States.;

- Developing upscale leisure niches in both tourism and quasi-tourism activities such as high-level condominiums; and

- Placing the industry on firmer footing by developing the full industry spectrum, from leisure tourists through meetings, incentives, conventions and events (MICE) visitors to business travelers.

60. Significant tourism diversification has already begun. Tourism in Aruba is a dynamic, well-capitalized sector managed by world-class professionals.

61. <u>Broadening the Base of Tourist Source Nations.</u> Residents of the USA currently comprise over 70 percent of overnight-stay visitors to Aruba. The steady drop in the value of the

US dollar (to which the Aruban florin is linked) vis-à-vis the Euro has made Aruba more affordable for EU residents. While Americans in general spend more than Europeans, increasing European arrivals would reduce the risk of a sudden drop-off in tourists due to a terrorist attack in the US. Maintaining or increasing the concentration of Aruba's facilities at the higher end of the quality spectrum would also perform a useful role in attracting the higher-spending end of European tourists. While the greater distance and flight times will always be a negative in Aruba's attraction to Europeans, Aruba's small size means that it is not necessary to capture a large percentage of the entire European market to make a big difference in Aruba. Apparently, KLM currently has a monopoly on airlift from Europe to Aruba, and this may be restricting opportunities to attract more Europeans. It seems worth exploring additional airlift from Europe via other airlines, and perhaps other means of attracting more higher-level European tourists.

62. Developing Upscale Leisure Niches. To keep room rates and overall revenue high, it is imperative to offer upscale accommodations and activities. The attraction of a top-ranked hotel such as a Ritz Carlton or a Four Seasons is an important and appropriate priority. This will be an important step in assuring that Aruba becomes "the Monaco of the Caribbean." A high-end spa, either freestanding or within a new high-end hotel, is another priority. Quality spa services will attract high-paying visitors, and increase their total spending.

63. Developing the Full Tourism Industry Spectrum, Including the MICE Market. Recognizing the value of adding high-spending MICE visitors to the tourist mix -- which is currently 95 percent leisure travelers -- the Aruba Hotel and Tourism Association (AHATA) has recently begun to focus on developing the MICE market. Aruba is gearing up to take advantage of the recent Tax Information Exchange Agreement with the US, permitting US corporations to expense the costs of seminars, meetings and conventions taking place in Aruba. The inventory of meetings and exhibition space is growing, with the Marriott offering a 9,000 square foot ballroom, the Wyndham a 10,000 square foot ballroom, and the Renaissance considering adding breakout rooms to its existing meetings space. The free zone is eager to offer space for showcasing products as well. While meeting planners negotiate room rates below what some leisure travelers pay, hotels would only accept meetings packages at rates higher than existing wholesale rates. As the MICE travelers take rooms that would have been filled by travelers who purchased vacations through wholesalers, room revenue and tax revenue in Aruba could increase with no increase in tourist volume, congestion, or foreign work permits, so long as US tax treatment remains favorable.

64. Through new or existing public-private partnerships, Aruba should strengthen its events planning. Several high-quality events were held in the past, including a jazz festival and a golf championship. Although manpower-intensive and time-consuming, events can play a key role in both attracting first-time and return visitors, as well as positioning Aruba as a high-end destination. The nature of such events must be carefully controlled to enhance Aruba's high-end appeal.

## Privatization of Governmental Services

65. As Aruba tackles the twin challenges of reducing public sector expenditures and diversifying the economy, it seems obvious to look for public sector activities that could be

undertaken appropriately by the private sector. While the main objectives of such action are to reduce public sector deficits and to improve efficiency in service provision, there could well be some diversification results as the private companies that provide the services find other, related opportunities for profit. Aruba has already made progress in this direction, depoliticizing the water and electricity company, WEB, by reconstituting it as an independent entity with its own management and Board of Directors.

66. In its analysis and meetings on the island, FIAS found several areas that may offer good potential for privatization:

67. E-government. E-government offers an opportunity for the development of the information technology industry in Aruba. As the nation modernizes, it is increasingly beneficial to utilize internet-based solutions to handle permitting, licensing, information dissemination, and other government services. Rather than expanding the government rolls to hire additional information technology personnel, bids could be requested from the private sector to handle the e-government transformation.

68. Translation Services. Another, albeit small area for possible government outsourcing is in translation services. In some cases, official documents are available only in Dutch, and it is necessary to translate the information into English, and in some cases into Spanish. By requesting bids from trained professional translators, the government can boost demand for professional services personnel.

69. Prison. The operation of Aruba's prison could be privatized, as governments in the USA and elsewhere are finding that total expenses can be reduced in this way.

### *2. Other Potential Opportunities*

70. The "High Potential" opportunities listed above seem to FIAS to be the best foci for investment promotion areas in the near term. These are the triad of education, health care, and tourism diversification, and the privatization of some public services. But there are quite a few other potential opportunities that may have significant potential for diversifying the economy, but represent smaller sectors that may have a more limited impact in the short term than "High Potential" opportunities. Depending on the size and resources of the investment promotion unit, these opportunities could be targeted either in a more limited manner than High Potential opportunities, or could be included in a second phase of target sectors. These include:

- Professional Services Opportunities
- Building Brand Aruba
- Environmental Protection Opportunities
- Aloe Opportunities
- Airport Services
- Real Estate Development

## Professional Services

71. Aruba has developed a cadre of skilled tourism professionals who have already begun to sell their skills and knowledge around the Americas. Aruba's tourism industry has shown tremendous growth, developed a wide range of tourism products, and maintained high room rates and high occupancy rates, goals of many nations in the region, and goals that professionals from Aruba are already helping other nations to reach. To date, professional expertise from Aruba has been exported to both Panama and Peru, where consultants from Aruba are advising these nations' tourism industries how to set up casino operations, and train casino staff. Professional services such as these are a growth and diversification opportunity for Aruba.

72. Aruba has many comparative and competitive advantages supporting growth in this sector. Multilingual professionals can work in English or Spanish, and often Dutch if necessary. The nation's tourism success is evidence of the quality of Aruba's tourism professionals. Frequent flights facilitate easy travel.

73. Professional services offer important links to Aruba's tourism sector and educational sector. Professionals can hone their skills in Aruba's top-ranked tourism facilities. They can teach in the emerging hospitality education industry. In turn, students from other nations attending hospitality courses in Aruba represent the seeds of a market for Aruba's consultants. Such synergies contribute to continued development across the industries.

74. The principal jobs emerging from this sector would be tourism consultants, marketing consultants, niche market specialists, tourism product development experts, aviation experts, and cruise specialists. Over time, success of tourism consultants could have a demonstration effect on other professionals not related to tourism, encouraging them to also seek larger markets for their expertise.

## Building Brand Aruba

75. The approximately 1.2 million tourists who return home from Aruba each year represent a potential market for a variety of items that could be designed in Aruba and marketed from Aruba, although in many cases actual manufacturing would take place in a lower cost location. These items include swimwear, resort wear, active wear, sportswear, sandals, specialty food items, and artisanal handcrafted items. These items have commercial appeal because of their link to the tourist's positive vacation experience in Aruba. In essence, they build on the success of tourism in Aruba, carrying over success in that sector to new industries. Evidence of this diversification is already beginning to appear in Aruba, such as Aruba Aloe's plans to export to the U.S., as well as exports of a local tropical-flavored beverage to Holland. Sales of such items could begin with existing tourists while they are on the island, but the goal is export markets in the nations that serve as the source of tourists to Aruba.

76. Aruba has both advantages and challenges in developing this design sector. The nation has the advantage of a potential base of millions of potential customers who have visited the island, as well as emigrants eager to purchase products from home. Challenges include building

up the skills and experience of the personnel, high manufacturing costs that may require manufacture in a separate location, and marketing in competitive global markets.

77. The design sector offers attractive linkages with other industries in Aruba. Improved native design can enhance the uniqueness of the tourism experience in Aruba, incorporating everything from local packaging, gift and souvenir items, to furniture, accessories, and interior design in the small hotels and restaurants.

78. Growth in this sector would not depend on immigration, but would pull personnel from the current population and those who have emigrated. The types of jobs to be created would be designers, engineers, and marketers. As in many other kinds of diversification opportunities, chances for success are currently impeded by tax, immigration, and work permitting rules that impede the supply of the entrepreneurs and skilled professionals who are likely to undertake such activity.

## Environmental Protection

79. As Aruba's resident and tourist population has grown, so have the pressures on the island's waste management systems. Aruba is not alone; the United Nations has identified this sector as both a challenge and an opportunity for research and private investment in small islands generally.

80. Aruba's waste management issues create several opportunities for new businesses. Pressure on landfill capacity has given impetus to some recycling and waste export already. Some businesses recycle plastic internally, while large hotels and importers collect, compress and export aluminum, cardboard, and white paper. These efforts have resulted in a 15 percent drop in waste volume at the landfill. However, it appears there is no household recycling collection. In addition, glass recycling may be stalled due to a lack of economically sound reuses. One reuse option raised is for artisanal glassblowing, creating ecologically friendly handicrafts and souvenirs. Burning combustible refuse to generate electricity may be another sound business opportunity, reducing landfill pressure and producing energy at the same time.

81. Whether environmental protection business opportunities are profitable will depend on the interplay of prices of transport, recyclables and landfill dumping fees both now and in the future as pressure on landfill capacity mounts. Based on behavior of current businesses, it is likely that recycling or at least collection and export of certain waste products represent a current diversification opportunity. Political pressure from the environmentally minded may mandate household recycling even in the absence of economic reasons to do so. Without a manufacturing base, Aruba may not be able to recycle on the island profitably but could collect and export recyclables.

82. Linkages with other sectors are myriad. Recycling may generate the raw material needed as inputs to other industries such as packaging. Reducing landfill pressure may free land for other productive purposes. Recycling may assist the tourist sector to continue to win awards and remain certified as eco-friendly. Jobs created in the environmental protection sector would include managers, recycling engineers, vehicle operators, and sanitation engineers. Jobs in this

sector are not as unglamorous as they may sound; these activities support many moderate and high-wage employment opportunities.

## Aloe

83. The aloe industry represents a diversification option for Aruba. The aloe vera plant was established in Aruba in the mid-1800s, and for nearly a century was an important exporter until synthetic products replaced aloe in its principal product, laxatives. This long tradition is reflected in the aloe plant's place in Aruba's coat of arms.

84. Aloe is currently undergoing a resurgence, both in Aruba and globally. Beginning in 2000, Aruba Aloe transformed its operations under new ownership, growing aloe locally and extracting its gel for several personal products and skin care lines, as well as processing imported Venezuelan aloe for export to the European pharmaceutical industry. Aruba Aloe is able to compete in manufacturing, even with high labor costs, in part because the process is capital intensive.

85. The global aloe market is large and growing. The International Aloe Science Council estimates the aloe raw material market at $125 million, and the market for finished products containing aloe at $110 billion. Aloe is used extensively in personal care products such as lotions and pharmaceuticals, and increasingly as "nutraceuticals" (food with physiological effects above and beyond its nutritional benefits) and wellness drinks. Responding to growing market demand for herbal and natural products, many new aloe products are being launched by major international producers. In fact, aloe leads the list of recent product launches containing herbal ingredients, with 1,200 new launches, twice as many as its closest runner-up.

86. While the island may be too small and its costs too high to support significant increases in aloe production and harvesting, Aruba has several attributes making it attractive for aloe manufacturers. It offers easy access to large consumer markets for sun care products, including its own tourist market and that of the region. It has a long history with the product. Aruban aloe is high quality, and the Aruba brand has a positive image. Aruba is conveniently located between producers in South America, and European and US markets.

87. One additional positive aspect of the aloe market is the diversification it offers away from the U.S. and Europe, toward China and other Asian nations. Herbal and natural health care products are highly valued among China's population of 1.3 billion, which boasts the largest growing middle class in the world. Total cosmetics and toiletries sales in China are expected to grow by 63 percent from 2002 to 2005, having grown by almost that same percentage in the previous 5-year period. Serving this large and growing market offers an attractive hedge against slower or even negative growth in certain sectors in the US and Europe.

## Airport Services

88. Aruba's location between North and South America, its high-quality airport infrastructure and large number of international flights have led numerous groups to discuss the nation's transport hub potential. Preparing for the mission, a FIAS team member identified a fixed base

operator as a potentially lucrative opportunity for Aruba, based on the nation's new airport, central location, and safety and security. (The term "fixed base operator" or "FBO" refers to a company that uses existing airport infrastructure to land, refuel, service, and park or store private, non-commercial aircraft.) Indeed, on arrival on the island the team learned that a Memorandum of Understanding for a fixed base operator at the Aruba international airport has been signed.

89. The fixed base operator (FBO) is a good complement to Aruba's existing airport operations. Other ancillary services could include transferring tourists to hotels, simple accommodations on-site for pilots, and sale of supplies for pilots. The FBO will generate jobs and revenue.

90. Linkages to other sectors include easier access for tourists in private aircraft; and additional revenue from refueling operations. Jobs created are likely to include managers, aircraft maintenance and inspection personnel, mechanics, line crews for refueling, and administrative staff. Since an airport only supports a single FBO, no promotion of this subsector is needed at this time, but if the deal underway were not to proceed, then an FBO would merit promotion.

## Real Estate Development

91. This set of activities seems to have both strong positive claims for development in Aruba, and at the same time some strong limitations, negatives, and question marks.

92. Aruba is beginning to explore real estate development to complement its tourism industry. Other Caribbean nations are also developing this industry, such as for example the 3,500 unit "AtlanticA" high-end yachting and resort community in the first phase of development in the Dominican Republic (www.atlanticadr.com). It is anticipated that condos and villas will bring in a steady stream of foreign spending without the peaks and valleys that can accompany transient visitors.

93. Some of the positives for this sector include:

- Potential strong positive linkages to the education and health care triad: condominium developments targeted at middle- to high-end long term visitors and/or retirement residents can complement, in both directions, better health care facilities, primary and secondary boarding schools, and tourism. They would also have lower requirements for low-skilled workers than hotels, and generate more purchases of goods and services, in general, on the island.

- If taxes were structured effectively, condos could contribute tax revenue. A new type of resident permit would be required, one which limits the expatriate's access to social services such as free health care and old-age pensions, but this is certainly doable.

- Aruba's location outside the hurricane belt could be a significant attraction for yachts, both sail and motor. Grenada's recent catastrophic experience with Ivan may represent a window of opportunity here. A high-quality marina development, with linked condos and other services, might work out quite well.

94. However, at the same time, real estate development faces several challenges for Aruba. Some of these are:

- Without a large local labor force, and with strict work permit limitations, construction costs may be higher on Aruba than competing destinations.

- Development of this sector could involve a construction boom in the building phase, with attendant private sector prosperity possibly accompanied by strains on housing and social services and possibly followed by high unemployment.

- Sales of condos and villas may have an important linkage with the development of Aruba as a premier golfing destination. But golf courses are expensive to design and maintain, particularly given the need for irrigation in Aruba's climate and the high cost of desalinated water. Golf developers may be counting on the revenue from the sale of villas and condos surrounding the course, as the increased land values adjacent to the course can constitute an important source of capital. Thus, there are some positives but also some negatives involved in golf-related real estate development in Aruba.

### *3. Interesting but Problematical Ideas*

95. There are other ideas for diversification that are interesting but problematical. Some of these may come to fruition, but given the limited resources available to the proposed investment promotion department, FIAS does not recommend them as high-priority sectors for investment promotion at this time. These ideas include:

- Cargo Transshipment Hub
- Offshore Finance
- European Union Market Access Opportunities

### Cargo Transshipment Hub

96. Because Aruba imports more than it exports, airline cargo space and marine containers frequently return to foreign markets with unused capacity. Several initiatives have been developed to attempt to take advantage of this capacity for transshipment. However, the transshipment hub opportunities face serious challenges to their feasibility.

97. One problem is whether an air shipment hub based on unreliable "filler" space on aircraft could attract investment and clients. Another is the high infrastructure costs in Aruba; yet a third is the extensive facilities that already exist in the region for both air and marine transshipment.

Currently in Aruba, shipping costs are high due to low volumes, and port charges are also high. The port charges overtime after 4:00 p.m., apparently the only port in the region to do so. In its favor, Aruba does offer one of the lowest tariffs for cargo transshipment, yet the low cost is not able to outweigh Aruba's lack of competitive and comparative advantages in this arena. The infrastructure improvements needed would be expensive, with some knowledgeable individuals recommending 4 cranes, yet the shipping companies, by definition mobile, don't offer long-term guarantees. There has been some interest in transshipping goods from Manaus, Brazil, through Aruba, twinning Manaus's manufacturing capacity with Aruba's empty containers. Given the many steps required to bring the goods to Aruba, and then ship them on, it is unclear why the arrangement would offer a cost savings, or why a more-developed transshipment port such as Trinidad, Panama, or Curaçao wouldn't be more cost-effective. Curaçao currently has a strong competitive edge over Aruba in transshipment, with good infrastructure, yet even there the sector is struggling. Well-capitalized and skilled entrepreneurs might succeed in this sector, but many obstacles would have to be overcome.

## Offshore Finance

98. The development of Aruba as an offshore financial center clearly warrants consideration, given the importance of the sector in other Caribbean nations. Aruba has the infrastructure to support the industry, including knowledgeable tax, legal, and financial professionals, and a developed banking industry. Development of the sector would create the type of high-wage, services employment opportunities that meet Aruba's goals.

99. That being said, Aruba faces a number of obstacles in growing its offshore banking capabilities. Perhaps most significantly, the offshore banking industry is shrinking in the face of pressures from the OECD, the EU, and the US. Carving out a profitable niche is most easily accomplished in growing markets; succeeding in a dwindling market would mean taking market share from existing firms in nations with a more established industry. In addition, it is unclear what Aruba's comparative and competitive advantage would be, as existing offshore banking centers would seem to outrank Aruba on any given metric. In numerous interviews, knowledgeable individuals have demonstrated skepticism about Aruba's ability to develop its offshore banking industry.

## European Union Market Access Opportunities

100. A diversification opportunity that has received some attention is duty-free exports from Aruba, an EU member through the Kingdom of the Netherlands, to the European Union. Several opportunities have been seized upon in recent years to export sugar and rice to the EU, taking advantage of preferential treatment. However, these are ending in the near future, and no similar prospects have been identified. A periodic review of tariff structures should be undertaken, so that idiosyncratic breaks of this type could be unearthed. In general, however, EU access does not appear to grant Aruba a significant comparative advantage, for two reasons. First, many EU tariffs are in the single digits, reducing the value of duty-free status. Secondly, a significant percent of the value of an export must be added in Aruba to qualify for duty-free entry; Aruba's inherent high transport and manufacturing or processing costs stymie its ability to compete in any product line for which there is no special EU entry privilege. Thus, Aruba does not appear

poised to serve as a cost-effective export platform for South American or Caribbean products into the EU.

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Actions that the Government needs to take to facilitate the emergence and the success of these and other opportunities for Aruba are the subject of the next part of this report.

# PART II

## IMPLEMENTING THE STRATEGY

# CHAPTER IV

# IMPLEMENTATION: OVERVIEW

101. FIAS may not have a crystal ball that shows us, accurately, which diversification opportunities will work best in Aruba. But FIAS does have 19 years of experience in some 120 countries, learning about what kind of business climate is necessary to improve the likelihood that good, productive investments will be made and will succeed. An extensive empirically-based literature complements our experience. Many of the elements of a good business climate are the same in all cultures and all economies, while other elements, and their priorities, vary from one situation to another.

102. Aruba already has a very good business climate. Its economic success testifies to this: *res ipsit locutor*. But that business climate, which was well-adapted for Aruba's success in the one activity where its comparative advantage so clearly lies, is not so well-adapted for success in diversification and sustained continued growth in the future.

103. FIAS has identified four areas where Government needs to act in order to achieve its goals. There may be additional actions that would be productive, but these four are the most important.[3] They are:

104. <u>Taxes and incentives</u>: The old system of far-reaching tax holidays, favorable access to land, very generous investment allowances and depreciation rules, and yet additional government assistance was very effective in attracting investment in hotels. But that system no longer exists, and more and more hotels are not what is desired in any case. Elements of the present system, including the existing corporate income tax, the IPC scheme, the personal income tax, import duties, and other revenue provisions all require adjustments. Moreover, Aruba today faces a large and growing structural deficit. Any tax reform should also address this problem; to do so is far beyond the scope of FIAS mandate but it must be taken into account.

## A. Tax Reform

105. Tax reform will be discussed in Chapter V5

## B. Investment Promotion

106. International investment markets are not some text-book-perfect, all-seeing and instantly-adjusting mechanism. Especially for a small economy such as Aruba, and one which is attempting to develop in somewhat different directions, it is crucial to have a professionally-staffed institution to help things move. It does not have to cost a fortune, but it must have a sufficient budget. It must develop an effective strategy and must implement that strategy well.

[3] The FIAS findings here are echoed by the IMF January report on Aruba which noted the needs to improve public education, including training, and also the regulatory and tax environment. Privatization of some SOEs, as mentioned in Chapter 3 of this report, was another of the Fund's suggestions.

107. Priorities for sectors to promote were discussed in Chapter III. How to organize and do investment promotion for Aruba will be discussed in Chapter VI.

## C. Education and Labor Training

108. This topic was not on the list for the FIAS team to analyze, and indeed FIAS has no particular expertise in this important area. However, the team could not help but note some ways in which a stronger education and training system would probably have a big payoff in terms of the diversification goals. A new Faculty devoted to training for the hospitality industry is being created at Aruba University; if done well this could be an excellent example of building on an existing cluster to create something that both strengthens Aruba's competitive edge in that cluster and could lead to export of educational services as the Faculty grows and could train students from other countries in the future. Education focused on development of entrepreneurship, and small business management, might also be very useful. More generally, success in today's increasingly skill-based economy hinges on the development of advanced skills, especially if Aruba is to succeed in diversifying its economy in activities with predominantly high-wage jobs.

109. There are many possible positive linkages between improving education for the people of Aruba, on the one hand, and the diversification opportunities in education described in Chapter III. Some are obvious and others that we cannot foresee will be spotted by education professionals; yet others may appear. Aruba can export educational services for profit, and improve education for the people of Aruba at the same time. It is crucially important for the society, and its Government, to view this as a positive-sum game – to see how each kind of effort can support and complement the other. The opposite approach – viewing "education for foreigners" or "private schools" as something contrary to improving educational opportunities for the people of Aruba, or to Aruba's values in general – would be a tragedy. There is no inherent conflict here, and the job of good political leadership in this area is to develop and exploit the complementarities.

110. One competitiveness enhancement tool that has been implemented successfully by other jurisdictions is an Education Summit. Given the importance of education in Aruba both for diversification and for preparing tomorrow's workforce, the topic deserves high-level discussion and action. An Education Summit could bring together leaders from the public, private, and non-profit sector to examine the strengths and weaknesses of the current educational system, and chart a course for enhancement. Prior to the Summit, preparatory work could include surveying current and past students to gather their input, interviewing employers in leading industries, including the emerging clusters in education and health care, and preparing case studies of successful educational systems. The Summit could produce an Action Plan detailing the public and private sector investments needed to ensure the competitiveness of Aruba in the coming decades. The Department of Investment Promotion, discussed later in this report, could be a key player in organizing and facilitating the Education Summit as part of its efforts to promote private sector investment in education.

## D. Regulation and Administrative Barriers

111. This topic was originally to have been investigated in detail as part of the work for this report, but was temporarily set aside. From its analysis thus far, FIAS has found that the problems that are likely to be significant barriers to diversified growth in the future are concentrated in a few areas. Thus, future work should be focused on better understanding, and fixing, the problems in each of these areas, rather than in a broader or more general survey. These areas are:

- Restrictions on work permits for spouses of expatriates and other non-citizens with good skills and, perhaps, entrepreneurial energies. Aruba needs to reverse its current stance *vis à vis* such individuals; their presence on the island and in the labor force should be welcomed rather than restricted.

- Restrictions on disciplining and/or firing unsatisfactory workers. Casual observation suggests that in this respect Aruba combines, to some extent, the worst features of Europe and Latin America. The “happy medium” that will permit Aruba to grow and diversify in today’s highly globalized, competitive world is somewhere towards less indulgence and more discipline for workers. Many nations in both Europe and Latin America have found this to be true and are acting on it; the smaller they are, the more important it is. Aruba needs to change.

- Long delays in obtaining immigration and work permits. For this and the next item mentioned, administrative procedures should be studied and ways found to streamline them.

- Long delays in obtaining some business permits, especially land access and construction.

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# CHAPTER V

# TAXATION AND INCENTIVES4

## A. Overview

112. Any country's tax system may either facilitate, or impede, the growth of certain kinds of activities. For the most part, the effects of an unfavorable tax system in impeding investment are greater than the effects of a favorable system in inducing investment – in other words, an unfriendly tax system can be a big barrier to investment, but a business-friendly tax system will do little to foster investment unless the rest of the business environment is favorable. So any tax reform aiming to improve the business environment must (a) remember that the point of any tax system is to collect revenue, and (b) try to collect the necessary revenue in ways that don't unduly or unnecessarily interfere or discourage productive, desirable investment. This may seem like a nuance, but it is very important: the tax reformer's job is not to figure out how to attract investment; rather it is to figure out how to avoid discouraging it.

113. The current tax system in Aruba has many features that are favorable for investment, and others that are questionable or clearly negative. Like the tax systems in almost every country in the world, the system in Aruba as it exists today is the result of many provisions, enacted for many different purposes, with many compromises among conflicting objectives, over its history; some of those purposes are still valid but others are not.

114. Fiscal system as a whole: Aruba appears to have a structural deficit, with big deficits and growing public debt even in recent prosperous times. This problem, evidently beyond the mandate and the competence of FIAS, must be solved and any reforms must be consistent with solving it. Among its negative effects may well be a heightened sense of uncertainty among potential investors; knowing that some sort of tax and/or expenditure reform must happen, they may postpone some investments until they see what those reforms look like. Instability or uncertainty in a tax system may be a bigger impediment to investment than even unfavorable provisions in a stable system, because investors can adjust to the unfavorable provisions if they are known and stable, while planning for the unknown is more difficult, more risky, and usually more expensive.

115. Corporate tax and associated provisions: Despite a high statutory corporate income (profits) tax rate, the regular tax code contains a wide variety of provisions that reduce the effective tax burden on capital income, including highly accelerated depreciation deductions (in the form of partial expensing of one-third of the cost of land and all depreciable assets) and very generous investment allowances that are granted in the first two years of investments in all depreciable assets. In addition, the IPC regime introduced at the beginning of 2003 provides for shareholder rebates of virtually all (slightly more than 94 percent) of the corporate profits tax for firms that qualify for such treatment. (So far the number of such firms is very small, and indeed

[4] This chapter concentrates on analysis, conclusions and recommendations. Details regarding methodology and assumptions are contained in the appendix..

the eligibility criteria eliminate many firms *a priori*.)[5] As we shall see later in this chapter, the CIT by itself does not impose onerous burdens and is very unlikely to impede investments. However, a statutory rate as high as 35 percent is becoming more unusual over time, as more and more countries opt for lower rates, and it is possible that Aruba's high rate may act as a significant negative signal to investors who are scanning the horizon for places to locate a particular activity. Another problem with the CIT is that for many activities it contains strong biases that may distort choices among different kinds of investment.

116. Import duties: Import duties are a classic administratively efficient way to collect revenue on an island. The structure of Aruba's duties, however, appears to be an almost random assortment of rates resulting from various decisions in the past. One striking example is the 22 percent duty on furniture; this duty is important for investment in hotels, and would be for investments in activities such as schools and health care facilities that are among the best targets for diversification in Aruba. Within the hotel sector, this tariff is an especially heavy burden for renovating and upgrading hotels, which is a major goal of the Government. Apparently this high tariff on furniture is a holdover from the Netherlands Antilles duty schedule, where it was set to protect a domestic furniture manufacturing industry on Curaçao. We shall see later in this chapter that the import duty system as a whole is significantly burdensome to investment in Aruba today and is an important contributor to distortions of investment decisions across different business sectors, and needs to be reformed.

117. The anomalous and onerous aspects of the import duty schedule have been largely bypassed in the past by the tax holidays offered to hotels; these holidays included exemption from import duties. This regime, however, no longer exists. The entire schedule of import duties in Aruba cries out for review and rationalization; it is one place where reform can almost certainly be a win-win situation since it can be made simpler to comply with and to administer, more friendly to investment, and at little or no cost in terms of revenue loss.

118. Other business taxes that are important to investors are the hotel occupancy tax, the tax on casino receipts, and the tax on foreign exchange transactions. There is also a property tax on land and structures.

119. Personal income tax: The personal income tax applies to dividends received and interest income (although capital gains are largely exempt from tax), and has very high marginal rates going up to 62 percent. This high rate, even more than the 35 percent CIT rate, is very unusual in the region and around the world. It is particularly questionable in an economy that is (a) small and (b) has no serious unemployment problems but is seeking to attract higher-value services that rely heavily on medium- to high-skilled employees and entrepreneurs. Such people are just as mobile as capital, and a high tax rate may well send them elsewhere. These characteristics are especially marked in Aruba today, and thus the PIT is an obvious place to look for useful tax reform.

[5] Eligibility is limited to hotels with average revenue per room of at least $125 (this is not room rate, but actual revenue over the course of a year); most manufacturing and trading companies that are at least 75% exporters; shipping and airlines; large equipment leasing; much knowledge-based, research-based, and IT activity; certain insurance companies; holding companies; investment companies (excluding banking activities)

120. Other indirect taxes: There is no VAT or general sales tax. There are excises on alcohol, tobacco and fuel. This immediately raises the possibility of enacting a VAT or other general tax on consumption, which is completely appropriate to a small economy, could help solve the structural fiscal deficit, and easily compensate for any small revenue losses in the short run that might (or might not) be entailed by reforms of the CIT, PIT, and import duties.

## B. The "METR" Tool for Analysis

121. One problem in assessing tax systems is that, because there are so many tax provisions that interact in complex ways, it is difficult for policy makers to determine the net effect of all these provisions on incentives to invest. Fortunately, a now-standard public finance instrument — the "marginal effective tax rate" or METR — is a tool that can be used to quantify in a single measure the net effects on investment incentives of all of the provisions in a tax system that affect any particular investment, including any potential investment that might be part of a plan to diversify the economy.

122. The term METR itself provides some insight into the nature of this tool. A METR is *marginal* because it is based on an analysis of a prospective incremental investment – one that just breaks even, with its after-tax cost equal to its after-tax returns.[6] It calculates the *effective* tax burden in that it captures the net effects of all the provisions of the tax system, rather than focusing on a single characteristic such as the maximum statutory corporate tax rate. And it is a *tax rate* in that it is defined as the difference between the gross of tax and net of tax returns to an investment – the "tax wedge" between gross and net returns created by the tax system – expressed as a percentage of the gross return.

123. The basic concept of a METR can be illustrated with the following simple example. Suppose a business makes a marginal investment in a capital asset that just breaks even taking into account all taxes in the system, and earns an economic rate of return (net of depreciation but before any taxes) of 10 percent. Suppose further that, after accounting for all taxes, the net after-tax real return earned by the firm and paid to its investors is 7 percent. In this case, the METR on the investment is 30 percent: the 3 percent wedge between 10 and 7 percent, divided by the before-tax return of 10 percent. [7]

## C. Effective Tax Burdens as Measured by the METRs

124. We have estimated the necessary parameters to estimate METRs for investments in five different activities:[8]

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[6] METR analysis is thus not well suited to analyzing tax effects on investments that generate above-normal returns.

[7] Details of the METR methodology and a description of some of its applications are provided in the appendix.

[8] METRs for specific investment activities require estimates of the capital structure of the investment. The parameter estimates used for the three kinds of hotel investments and the refinery expansion come from actual private sector examples or investment plans in Aruba provided to the FIAS team; for the other activity, small service business, we relied on our own estimates. The appendix contains all the details about these parameters.

- a new, “greenfield” hotel
- a hotel expansion; that is, the addition of a significant number of rooms to an existing hotel
- a hotel renovation; that is, the upgrading or refurbishing of an existing hotel
- an oil refinery expansion
- a typical small service business

125. Among other interesting kinds of investment, the asset profiles of most educational facilities are, for tax purposes, very similar to new hotel investments and so METRs for education facilities would be close to those of hotels. Many health care facilities are not that different, although hospitals would have more machinery and equipment. So these results can give us a good first approximation of the effects of Aruba’s tax system on most of the relevant important kinds of investments for diversification.

126. Overall effective tax burdens: We first present, in Table 1 on the next page, the results that directly affect the “bottom line” for investors – that is, the overall results of (almost) all of Aruba’s taxes on after-tax profits.[9] Since Aruba has, in fact, two regimes of corporate profit tax, we present the results both for an IPC and for a firm that is subject to the regular tax system.

127. What’s interesting about these results?

128. The regular tax regime, with a CIT rate of 35 percent, shows METRs in the range of 12 to 44 percent. This will not surprise most readers, but much more surprising is the analysis to come which shows that it is not the CIT at all, but the other taxes, that create this burden. In the past, tax holidays reduced these burdens considerably; under present law there is no such relief.

**Table 1: Marginal Effective Tax Rates on Five Kinds of Investment, Considering All Taxes**

| INVESTMENT | METRs TAKING ALL TAXES INTO ACCOUNT (PERCENT) | |
|---|---|---|
| | REGULAR TAX REGIME | IPC COMPANY |
| new hotel | 31 | 32 |
| hotel expansion | 32 | 33 |
| hotel renovation | 44 | 49 |
| refinery expansion | 12 | 12 |
| small service business | 25 | 27 |

129. A digression on cross-country comparisons: A strong word of caution is needed before making any comparison of these METRs with those for other countries, as the latter are usually calculated and presented. The common practice in such work is to include only the CIT, or

[9] The 1.3 percent tax on foreign exchange transactions is not taken into account in the calculations, but is discussed in the recommendations.

sometimes both the CIT and any withholding tax, in the calculations. The indirect taxes such as import duties, the property taxes, and the hotel occupancy taxes that are included in this analysis for Aruba are often not taken into account in other work. Therefore, for international comparisons, the results in Table 1 (also in the right-hand columns of Tables 2 and 3) are not comparable to most METRs calculated for other countries.

130. FIAS included these other taxes in this analysis for two reasons. First, it's simply correct and potentially relevant, in all cases. The names of the taxes and their relative importance don't really matter to the stockholder of a company, who only cares about the effective burden of all taxes that come between the company's before-tax income and the stockholder's after-tax income. The more usual analyses that ignore these taxes are incomplete in that respect. The second reason for including these other taxes in this analysis is that they are especially important when considering diversification in Aruba. As the results show, both the levels of effective taxation, and their differences across activities, are for the most part the results of import duties and other taxes, not the CIT. Failing to include the broader array of taxes would have missed some of the main directions for an effective tax reform.

131. There are no comparable numerical results for other countries. In general, every country in the Caribbean, without exception, has a CIT and associated provisions that result in very low, zero, or negative METRs for most investment when only the CIT is considered. Some have withholding taxes and some do not. Duties on imports of various items needed by hotels is an issue in most of the countries of the region.

132. <u>Overall effective tax burdens under the IPC regime</u>: Going back to the results shown in Table 1: For an IPC the tax burden is virtually identical to that under the regular tax system.

So the IPC regime does not offer more generous investment incentives than does the regular tax regime. Our results also suggest that the regime is not necessary to attract new investments. The IPC was not designed to do this job. Apparently the Governments main objective with the introduction of the IPC regime, which was part of a package of new tax legislation implemented in 2003, was to comply with the OECD rules and code of conduct for business taxation of the EU, correcting the existing so called harmful tax practices in Aruba.

133. The differences in tax burdens among activities are also very interesting. Among the three hotel activities, the highest tax applies to the one that the Government is most interested in promoting: renovations. A new hotel, granted IPC status, faces a 31 percent METR while a renovation of an existing hotel is looking at 44 percent. So the tax biases within the tax system are opposite to the stated intentions of the Government, as far as which kinds of investments to favors within the hotel sector. In addition, preferential treatment of a refinery expansion, with exemption from all customs duties except those applied to furniture, implies that effective tax rates on this type of investment are significantly lower than for the other investment analyzed.

134. It is good that new small service businesses would enjoy a lower overall burden, but a METR of 25 percent may still be too high for Aruba to be a competitively low-tax location for these very mobile businesses, in which Aruba has no successful track record. The very high personal income tax rates make this problem worse.

135.   How different taxes contribute to the overall tax burdens: What's behind these surprising results? In Tables 2 and 3 we take them apart, showing how the different kinds of taxes contribute to the overall burdens shown in Table 1 above (which are repeated in the right-most columns of Tables 2 and 3.) Table 2 shows the results for the regular tax rules, and Table 3 for the IPC regime.

136.   Table 2 shows that the CIT by itself imposes no tax burden at all on the investments in any of the activities considered. (In fact, the negative METRs imply that if they are owned by companies with other tax liabilities, these investments would generate small tax savings.) This is true even with no tax holidays at all, and a 35 percent statutory rate. How can this be? The answer is, mostly, the very generous investment allowances – 12 percent per year for two years for structures, and 8 percent for other depreciable assets – combined with generous depreciation rules that allow immediate expensing of one-third of the cost of depreciable assets, and even land. Moreover, the cost basis for depreciation is not reduced by the amount of the investment allowances. This means that an investor can write off a total of 116 to 124 percent of most investments (less salvage values), with about 41 to 45 percentage points taken in the first year, followed by another hefty deduction the second year. So, except for some kind of signaling effect, the tax holidays from the CIT that used to be available were in fact unimportant!

137.   Given these generous rules under the CIT, it turns out that what matters for the investor are the other taxes. Withholding taxes plus personal income taxes, imposed on shareholders at the rather low rates we assumed here, boost the tax wedge -- to around 10 percent under the IPC regime, and a bit less under the regular one. Indirect taxes, which essentially are import duties, add as much as 20 percentage points to the wedge – with a much larger effect for hotel renovations. With the exception of investments in a refinery expansion, all the tradable depreciable assets that enter the METR calculations for the five activities we have analyzed are subject to import duties of at least 7.5 percent; some of them much higher; the impact of these duties is magnified because they apply to the gross price of the asset, rather than to a measure of net income. Property taxes add only a small amount, and room occupancy taxes (relevant only for hotels) boost the marginal tax rate for those investments by another 10 percentage points, approximately.

138.   These breakdowns shown in Tables 2 and 3 show that the importance of the tax holidays was the exemptions they granted from import duties, and from withholding taxes on dividends -- not the exemption from the CIT. The IPC regime, which does not grant these import duty or withholding tax exemptions, results in higher overall tax burdens than did the tax holidays, exactly for that reason. The CIT itself, with its very generous investment allowances, accelerated depreciation, and other business-friendly provisions, implies that it, in the past as well as today, had very minor effects on the investor's bottom line.

139.   The importance of import tariffs: If we accept the hotel occupancy tax as a useful way to tax the tourism business, then we conclude that the place to reduce these high tax burdens is mainly on import duties – especially the 22 percent tariff on furniture, which hobbles hotel expansions and, especially, renovations, and is only an accidental holdover from a previous Netherlands Antilles regime which was of doubtful value in that context and is simply irrelevant for Aruba today.

**Table 2: Separate Impacts of Parts of the Tax System, Regular Tax Regime**

| | METRS TAKING VARIOUS TAXES INTO ACCOUNT, REGULAR TAX REGIME(PERCENT) | | | | |
|---|---|---|---|---|---|
| INVESTMENT | CIT ONLY | ADD WITHHOLDING AND PIT[10] | ADD INDIRECT TAXES | ADD PROPERTY TAXES | ADD ROOM OCCUPANCY TAX = ALL TAXES |
| NEW HOTEL | -2 | 8 | 20 | 22 | 31 |
| HOTEL EXPANSION | -6 | 4 | 19 | 21 | 32 |
| HOTEL RENOVATION | -14 | -3 | 32 | 32 | 44 |
| REFINERY EXPANSION | 1 | 10 | 11 | 12 | 12 |
| SMALL SERVICE BUSINESS | -6 | 4 | 24 | 25 | 25 |

**Table 3: Separate Impacts of Parts of the Tax System, IPC Regime**

| | METRS TAKING VARIOUS TAXES INTO ACCOUNT, IPC REGIME (PERCENT) | | | | |
|---|---|---|---|---|---|
| INVESTMENT | CIT ONLY | ADD WITHHOLDING AND PIT[11] | ADD INDIRECT TAXES | ADD PROPERTY TAXES | ADD ROOM OCCUPANCY TAX = ALL TAXES |
| NEW HOTEL | 2 | 10 | 21 | 23 | 32 |
| HOTEL EXPANSION | 2 | 10 | 22 | 24 | 33 |
| HOTEL RENOVATION | 2 | 9 | 38 | 38 | 49 |
| REFINERY EXPANSION | 2 | 10 | 11 | 12 | 12 |
| SMALL SERVICE BUSINESS | 2 | 10 | 26 | 27 | 27 |

140. The entire import tariff schedule should be reviewed, and rationalized with a simplified schedule that imposes very low duties for capital goods and intermediate goods (for example, no

[10] Estimates for the effects of withholding and personal income taxes, needed to calculate Column 2 and further columns to its right in Tables 2 and 3, are inevitably somewhat arbitrary unless we specify a variety of characteristics of the owners – residents of Aruba or foreigners, corporate or physical persons, country of residence of foreign corporations or individual stockholders, and a wide variety of additional details. The assumptions we made are explained in the appendix, and correspond to a shareholder subject to moderately low taxation: combined withholding and PIT on dividends of 5 percent and PIT on interest receipts of 10 percent.

[11] See the immediately preceding footnote.

more than 5 percent), and somewhat higher duties for consumer goods. In most of the several cases where a particular good may be either a producer good or a final consumption item, such as furniture, the item should be placed among the lower-tariff category if possible. Table 1a, which can be compared to Table 1, shows the impact of introducing a 5 percent uniform tariff on all capital goods, including furniture and all inputs for a refinery expansion, on the combined effective tax burdens, with all other features of the tax system unchanged.

**Table 1a: Marginal Effective Tax Rates on Five Kinds of Investment, Considering All Taxes, With a Uniform Five Percent Customs Duty (compare to Table 1 above)**

| INVESTMENT | METRs TAKING ALL TAXES INTO ACCOUNT (PERCENT) | |
|---|---|---|
| | REGULAR TAX REGIME | IPC COMPANY |
| new hotel | 28 | 28 |
| hotel expansion | 27 | 29 |
| hotel renovation | 28 | 35 |
| refinery expansion | 20 | 20 |
| small service business | 17 | 21 |

141. Rationalizing import duties in this way, and maintaining the rest of the existing system, would thus result in total marginal effective tax rates in the range of 27-35 percent for the three types of hotel investments and 17-21 percent for the refinery expansion and the small service business. The hotel investment METRs are higher due to the room occupancy tax. Neglecting this factor (e.g., on the grounds that it may be largely shifted forward to tourists in the form of higher hotel prices), the METRs on the three hotel investments would fall in the same 17-21 percent range, including the corporate tax, withholding and personal income taxes, and the reduced customs duties. This level of taxation, considering that it includes the burden of withholding taxes on dividends and personal income taxes (at assumed low rates) on shareholders, is arguably low enough for whatever international competition Aruba may face in trying to attract footloose investment – if problems such as the high personal income tax rates, and others mentioned in this report, are also addressed.

142. The FIAS team was not been able to get the data for detailed calculations, but we expect this reform could be revenue-neutral, or at least close to it. Import duty collections have averaged 8 percent of the value of merchandise imports for the four years 2000-2003; tariffs of something like 5 percent on producer goods and 15 percent on consumer goods, with no exemptions, could probably collect about the same amounts or even more. Moreover, this approach to reform would reduce the distorting effects on investments that the present system has among different kinds of assets (as described in the appendix). Rationalizing the import duty schedule in this way is the first and most important step needed, to make up for not granting any new tax holidays and to improve Aruba's business tax scheme as a whole.

## D. Conclusions and Recommendations

143. Customs duties: As previously discussed, Aruba's customs tariff schedule is a collection of various historic considerations. Many of these are no longer of any relevance, and the resulting taxes impede the achievement of many of the goals of the nation. The entire schedule should be reviewed, with a view towards rationalization involving fewer rates, with very low rates for capital and intermediate goods, and somewhat higher rates for final consumption goods. Special attention should be paid to items important in activities such as hotel upgrading and refurbishing, educational and health-care institutions, and other top diversification possibilities. Since total collections from this tax have been averaging only 8 percent of all merchandise imports (for the four years 2000-2003), it should be easy to collect the same or even slightly more revenues with a more rational tariff schedule, with lower duties for all producer goods, and the lowering of all tariffs now above, say, 20 or even 15 percent. The effects of such a reform were described above (Table 1a) and show that, neglecting the hotel occupancy tax, it would result in METRs in the 17-21 percent range on the five potential investments analyzed.

144. The personal income tax: The personal income tax was not a primary focus of our work. But it is very clear that reforms in this area would make big improvements in the investment climate in Aruba.

145. For individuals, the loss of attractiveness of Aruba due to its unusually high income tax rates is obvious. The problems for a multinational business firm, which some dismiss with a "let them pay it," are more significant than some may realize. The additional salary that must be paid by a firm that wishes to relocate a skilled expatriate worker to Aruba is especially high since the worker's salary must be "grossed up" to offset Aruba's high personal tax if the goal is to leave the worker with the same after-tax income. For example, a U.S. company must pay $150,000 to an individual who faces an average U.S. personal tax rate of 33 percent to yield an after-tax income of $100,000. If that same individual faces an average personal tax rate of 50 percent in Aruba, the individual must be paid a gross salary of $200,000 to yield the same after-tax income of $100,000. Thus, the required salary increase is one third (rather than just the 17 percent differential between the two average personal tax rates).

146. The key problem is the very high marginal tax rates under the personal income tax, which range up to 62 percent. In a small open economy such as that of Aruba, entrepreneurs and high-skilled people are highly mobile – as mobile as capital in the long run, especially as advances in technology and telecommunications facilitate the accomplishment of various tasks, including some management activities, from remote locations. This holds for current residents of the island, and even more so for skilled foreigners and the island's diaspora, who could be crucial to many of the most promising diversification opportunities. The high rates of personal tax create a strong disincentive for such skilled individuals to seek to work in Aruba, and for companies to employ them.

147. If Aruba's development goals were just to add more hotels, the existing personal income tax could, perhaps, remain untouched. But to succeed in diversifying the economy, just a glance at the likely opportunities described in Chapter III immediately shows that these high rates may well be very significant obstacles.

148. The standard reform prescription would be to expand the base of the personal income tax and then lower rates, with a maximum rate in the range of 30-40 percent. Although a full analysis of how best to do such a reform is beyond the scope of this report, there are apparently some opportunities for such a reform; for example, Aruba could obtain some of the revenues for a base-broadening, rate-lowering reform by scaling back or eliminating various deductions, such as those for home mortgage interest, national health insurance premiums, life insurance premiums, charitable contributions, personal loans, and undocumented business expenses. (Some moves in this direction have been made recently, including limiting excessive deductions for child expenses for individuals who provide only partial child support, and there is currently considerable discussion of reducing the very highest existing marginal personal income tax rates.) Lowering personal income tax rates, especially at the high end of the income distribution, should be made a high-priority for reform in Aruba. Any revenue loss can be balanced by a combination of broadening the personal income tax base, and/or (very easily) by revenues from the introduction of a value-added tax. Over a period of time, some of this revenue loss would also be made up by an increase in the amount of higher-income labor – as well as other increases in the tax base -- that would be part of successful diversification.

149. The IPC regime: For a company that qualifies for IPC status, the corporate tax again results in a relatively low tax burden if it operates as envisioned by its designers – that is, if refunds of virtually all of the corporate tax paid are made promptly. However, since the regular corporate tax regime also imposes a very low burden, firms on average do not benefit greatly from achieving IPC status. This is especially true once indirect taxes, property taxes and the hotel occupancy tax are added to the analysis. In these cases, as a general rule, the METRs for an investment by a firm subject to the regular tax system and the METRs for the same investment by a firm that has IPC status are remarkably similar for all five types of potential investments.

150. Both regimes of the current tax system are considerably less favorable to investment than the tax holidays that were formerly granted to many companies, including those in the hotel and refining industries. This result is not attributable to the corporate profits tax, which results in a relatively low tax burden even without tax holidays, but to the fact that tax holiday firms are also exempt from customs duties and withholding tax on dividends. It is these exemptions that are the most important in reducing the tax burden on tax holiday firms and, since under the new fiscal regime both firms subject to the regular tax system and IPCs must pay customs duties (with the exception of investors in a refinery expansion), their tax burdens will be significantly higher than those of firms currently subject to tax holidays.

151. One important implication of this result is that the political pressure to maintain tax holidays is likely to be considerable, especially if customs duties are not reduced along the lines recommended.

152. One potential advantage of the IPC system stressed by its proponents is that the corporate income tax paid by a firm that qualifies for IPC status might be fully creditable against domestic tax liability for a U.S. multinational (or firms from other countries that grant foreign tax credits), thus effectively transferring revenue from the U.S. Treasury to the government of Aruba without

creating any tax disincentives to investment. Only the US Internal Revenue Service can decide this and so far they have not had occasion to do so.

153. Although it is possible that corporate taxes paid by an IPC would be creditable in the U.S., there is a lot of room for doubt. While a full discussion of this issue is far beyond the scope of this report, it may be useful to note that the U.S. specifically does not grant creditability to a tax that is used to finance a "subsidy" to the taxpayer, where the definition of a subsidy explicitly includes a rebate of tax, based on the amount of the original tax paid, to a related person. On these grounds, creditability of corporate tax paid by an IPC but rebated to the shareholders by the government would appear to be unlikely. It could be argued that the IPC payment should be viewed not as a subsidy to the shareholder, but as a means of achieving integration of the Aruba's corporate and individual level taxes, under which a single level of tax would be paid at the individual level with the corporate tax serving primarily as a withholding device. However, even if this view were to prevail, the US authorities might well rule that the corporate tax paid by an IPC should be creditable only to the extent that tax was ultimately paid at the individual level.

154. <u>The tax on foreign exchange transactions</u>: The 1.3 percent tax on outward foreign exchange transactions is a nuisance tax that sends a negative signal to investors. They may rightly feel that, having paid all other taxes that might be due in Aruba, they should be allowed to transfer their money to wherever they like, without paying an additional tax for doing so. Although this kind of tax has become increasingly popular in the region and many parts of Latin America, FIAS suggests that Aruba can send a positive signal to investors, at little cost to its Treasury, by repealing this tax.

155. <u>Corporate tax reform</u>: All the reforms discussed above, especially the rationalization of the customs tariff schedule with lower duties on producer goods, and the drastic reduction of the counterproductively high marginal rates in the personal income tax, could be sufficient to render Aruba sufficiently competitive in terms of its effective tax burden. However, even with these reforms, the remaining burdens are still a bit high. Perhaps an even more important reason for CIT reform, however, there are problems that are inherent in the nature of the current CIT approach in Aruba. The existing regular tax regime in Aruba is a fairly typical case of a high statutory rate, compensated by generous write-offs such as investment tax allowances, investment tax credits, accelerated depreciation, full deductibility of interest including any in an inflationary component, etc. In Aruba's case, the notable write-offs of the investment tax allowances combined with the accelerated depreciation are unusually generous compared to provisions in other countries.

156. Such regimes are being replaced, in more and more places, because they have several weaknesses:

- A high statutory tax rate creates incentives for multinationals to use accounting manipulations, such as transfer pricing schemes or judicious allocations of loans, to shift revenues away from, and deductions to, the high rate jurisdiction. Such manipulations can dramatically reduce revenues in countries with relatively high statutory tax rates such as the current rate in Aruba.

- Incentives are necessary to compensate for a high statutory CIT rate, and in spite of their weaknesses, tax holidays are a very popular choice. Tax holidays are ineffectively targeted; they reward the founding of a company, and do not reward investment by existing companies. They discriminate against investments that rely on long-lived depreciable capital. They are better at attracting footloose industries, and less effective for investments that bring more significant long-term commitment. They can lead to a large erosion of the tax base as taxpayers learn how to use the tax holidays to reduce or eliminate the taxation of income from other sources. The discretion with which they are usually granted often causes delays and complexities, and is an invitation to corruption.

- A high statutory rate may create the perception in the international business community of an unfavorable tax regime. Even if the effects of the high statutory rate are greatly mitigated with investment incentives, a country with a high rate may fail to pass the first screening that decision-makers typically use when they make up their "long list" for potential investment sites. The more favorable conclusion that might come from a more careful analysis of the details of the tax system may never happen, because the country is eliminated before the more careful examination that is part of winnowing the "long list" to the "short list."

- A lower-rate, broad-based approach to corporate taxation reduces the bias in favor of debt financing, instead of equity, that is inherent in any standard corporate income tax scheme.

157. For all these reasons, FIAS recommends a more comprehensive reform, which would lower the CIT statutory rate to a level more comparable with neighboring countries. This would increase the competitiveness of Aruba in seeking investments. It would also reduce incentives for multinationals to shift profits away from Aruba, while still gaining some revenue from both existing and new investments. With a lower CIT rate, depreciation deductions and investment allowances could be adjusted to reduce distortions among assets.

158. For example, one such plan (among many plausible alternatives) would be to lower the statutory corporate tax rate to 20 percent and all customs duties on capital goods to 5 percent (while maintaining somewhat higher tariffs on customer goods on the order of 15 percent and perhaps higher for certain kinds of cars to mitigate revenue losses). To reduce distortions across assets and raise some revenue from the corporate tax, the investment allowances could be eliminated (with no change in accelerated depreciation). To help equalize effective tax rates across assets, the depreciable lives for trucks and buses could be lowered from 10 to 4 years, for office equipment from 5 to 4 years, and for cars from 3 to 2 years. These changes would result in the METRs on the five potential investments analyzed in this report shown in Table 2a.

**Table 2a: Separate Impacts of Parts of the Tax System, Regular Tax Regime, Under Comprehensive Tax Reform**

| | METRS TAKING VARIOUS TAXES INTO ACCOUNT, REGULAR TAX REGIME (PERCENT) | | | | |
|---|---|---|---|---|---|
| INVESTMENT | CIT ONLY | ADD WITHHOLDING AND PIT | ADD INDIRECT TAXES | ADD PROPERTY TAXES | ADD ROOM OCCUPANCY TAX = ALL TAXES |
| NEW HOTEL | 5 | 14 | 20 | 21 | 31 |
| HOTEL EXPANSION | 5 | 14 | 21 | 22 | 33 |
| HOTEL RENOVATION | 3 | 12 | 23 | 23 | 37 |
| REFINERY EXPANSION | 8 | 17 | 25 | 26 | 26 |
| SMALL SERVICE BUSINESS | 6 | 15 | 24 | 25 | 25 |

159. With this approach, the impact of the CIT is small, with METRs ranging from 3-8 percent. Adding withholding and personal income taxes (in the low tax scenario) increases these METRs to 12-17 percent. Adding the uniform customs duty and property taxes results in METRs that range from 21-27 percent, while the hotel occupancy tax raises the METRs on the three hotel investments by about 10-14 percentage points. There is still a small bias in the wrong direction within the hotel sector, and small tax biases favoring investments in a refinery expansion and a small service business but these distortions are not big enough to have a significant effect on choice of investments.

160. To evaluate the effect of such a reform scenario on competitiveness in attracting foreign investment, recall that METRs of other countries are typically calculated with only the CIT, and sometimes withholding taxes, taken into account. With this in mind, Aruba’s effective tax burden from the CIT in the scenario shown in Table 2a is perhaps a bit high, but within the range of near-zero (positive or negative) METRs estimated for most competing jurisdictions.

161. If it were desired, and fiscally acceptable, to reduce Aruba’s tax burden still further, there are many options that could be explored. As just one more example, the package behind Table 2a could be liberalized by raising the accelerated depreciation in the first year after the investment, from 33 to 50 percent; this would lower the all-inclusive METRs by 2 to 3 percentage points from the levels shown in Table 2a for the five different investments. In another scenario analyzed by FIAS, setting the CIT statutory rate at 15 instead of 20 percent made almost no difference; this is not surprising since the generous depreciation rules make the CIT burden very low, at any statutory rate that might be considered. From an investor’s point of view, the parameter that would make the most difference in lowering the tax burden still further might be the withholding tax, but lowering or abandoning that tax in a country such as Aruba might create revenue problems from tax avoidance and evasion.

162. These fine points of reform are important. To decide on exactly what package would serve Aruba best would require analyzing the revenue effects of the different possibilities, as well as comparing the METRs to those offered by other countries that may be competing for the same kinds of investments. Without such analysis, FIAS's final word on this issue is limited to recalling that small jurisdictions cannot, and generally do not even try, to impose high effective tax burdens on mobile capital or skilled labor. Ultimately these taxes are borne by local residents, either in the form of lower wages to less-skilled labor, lower land rents, or higher prices for domestic non-tradable goods. Business taxes need not be zero -- but they must not be so high as to impede needed investment; government revenues must depend relatively heavily on indirect taxes (such as the VAT recommended for Aruba by both FIAS and the IMF).

163. <u>Move toward indirect taxation: a VAT</u>: In addition to reform of the CIT, PIT, and import tariffs, we cannot fail to note the obvious benefits of introducing a new broad-based low-rate value added tax (VAT). This is the best way to offset any revenue losses that arise from reform of the existing system as well as to reduce the current structural deficit.

164. The case for a new VAT has many elements, and indeed the introduction of a VAT (coupled with improvements in tax administration) was recommended by an earlier IMF mission.[12] In a small open economy like that of Aruba, taxes on consumption are generally more desirable than taxes on income, especially those, like the current corporate tax and customs duties on capital goods, that include counterproductive source-based taxation of highly mobile international capital. In particular, as a consumption-based tax that allows expensing of all purchases of capital equipment, a VAT exempts the normal return to capital (its METR is zero) while taxing above-normal rents at its statutory rate. As a result, the VAT does not create a tax disincentive for marginal investments but still taxes investments that earn economic rents. More generally, a large literature argues that consumption taxes are generally preferable to income taxes on efficiency, equity and simplicity grounds.[13] In addition, the enactment of a VAT would allow lower tax rates on highly mobile skilled labor under the personal income tax and elimination of the highly distortionary tax on foreign exchange; both of these reforms are likely to result in significant efficiency gains.

165. In addition to the general arguments supporting a VAT, there are two reasons why the current time is an especially propitious one to introduce a VAT in Aruba. Most importantly, there is a great deal of international experience in VAT design, as the tax is utilized in some 120 countries. Thus, Aruba could draw on this vast experience to design an outstanding VAT that would be consistent with the goals of economic efficiency, equity and simplicity in administration and compliance. Coupled with reforms of the existing corporate and personal income tax systems along the lines outlined above, the enactment of a well-structured VAT would leave Aruba with an excellent tax system that would be highly conducive to investment, including investments that would diversify the economy. In addition, although the tax treatment of new investments under a VAT is very generous, the introduction of a VAT imposes a tax on old capital. Although some of this might be offset with transition rules, the taxation of existing

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12 See http://www.imf.org/external/pubs/cat/longres.cfm?sk=16359.0. This report also argued that an indirect tax on imported goods and services could be a useful interim revenue raising measure, especially if time were needed to improve tax administration so that a VAT could be administered effectively.

13 See Zodrow and McLure (1991) for an extended discussion of the relative merits of taxation on the basis of income and consumption in a developing country context.

capital already installed provides an important (if temporary) non-distortionary source of revenue. Moreover, since much of this capital has benefited from extended tax holidays that are scheduled to expire soon, the taxation of old capital is not particularly inequitable in Aruba at this time.

166. Of course, a new VAT would be successful only if it were administered effectively, and the introduction of a new VAT would require additional resources both for startup purposes to facilitate administration and compliance and on an ongoing basis to improve tax administration and ensure effective collection.[14] Nevertheless, enactment of a new VAT, coupled with reform of the corporate and personal income tax systems and elimination of the tax on foreign exchange, is an approach that deserves serious consideration. [15]

167. Planning and implementing a reform: The best way to implement this rather large menu of tax reform would be to plan it all as one coordinated package, examining both the revenue side and the investment incentive/disincentive side, and taking into account the various linkages among taxes (for example, the fact that tax avoidance opportunities will arise if the PIT rate and the CIT rate are too different from each other). However, the package need not be put into effect in one grand "big bang." It is possible to enact a law that calls for gradual changes over a few years in the future, and/or to adopt other means to ease the transition – both on the budget, and on taxpayers.

[14] Note, however, that once a well-designed VAT is in place, it should be less costly to administer than the corporate income tax; indeed, greater simplicity in compliance and administration is one of the most frequently cited advantages of taxation on the basis of consumption rather than income.

[15] The IMF review of January 2005 also recommended "a broad based consumption tax;" a lower marginal rate at the upper end of the personal income tax, and a rationalization of the import tariff schedule along the same lines recommended in this report.

# CHAPTER VI

# A STRATEGIC APPROACH FOR INVESTMENT PROMOTION IN ARUBA

## A. Does Aruba Need an Investment Promotion Agency?

168. If the development strategy of Aruba were simply to attract more investments in hotels and associated tourist sector business, it would not need to do any investment promotion. It is very much "on the map" in this sector, where it has strong, proven inherent economic advantages.

169. But to diversify the economy into other activities, such as education, health care, other professional services, and others as discussed in Chapter III, promotion efforts are close to an absolute necessity. Aruba has little or no reputation in these fields and is probably not on many (or any) investors' maps of places that warrant deeper investigation as possible investment sites. Even to stimulate domestic investment, a good promotion agency can generate and/or facilitate activity and be a catalyst to help make investments happen.

170. Virtually all small countries, and many medium-sized and even large ones, have an investment promotion agency. Some are more effective than others, but they all have the same raison d'etre: the international market, wherein investors seek places to locate and countries (or regions) seek to attract investors, is far from perfect. Information is incomplete; investors' "follow-the-leader" behavior is well known and well documented. Especially when a country improves its business climate, and/or tries to strike off in some new directions, it needs to make sure that investors know about it and are nudged a bit to take a closer look for themselves. Since Aruba is tiny, off the map for most investments, will be improving its business climate (if it follows the recommendations of this report), and is striking off in new directions, it is a *prima facie* instance of the need for investment promotion.

171. At the present time, there is no single agency or department in Aruba that has the specific mandate to promote private sector investment. Whatever limited efforts that are being carried out in that regard are fragmented at best, and undertaken on uncoordinated, ad hoc, basis by various private sector institutions and government departments. The Department of Economic Affairs, Commerce and Industry is currently the government's *de facto* investment promotion arm. Its activities in that regard include:

- Approving applications for licenses to operate businesses
- Responding to investors' requests for information
- Publishing an "Investors' Guide" for industrial development in Aruba
- Hosting a website
- Maintaining a limited database on investment inquiries and projects
- Providing advice on trade matters, especially as they relate to trade treaties that affect Aruba

172. There are three officers engaged in these activities, which they undertake in addition to other duties they are required to perform within the department. There is no specific budget allocated for investment promotion activities -- they are funded from the general budget of the department. Thus promotion must compete, on a daily basis, for both personnel and budget that are responsible for other functions as well. The individuals involved are knowledgeable and committed to investment promotion, but in the current situation they cannot do much.

173. In addition to promoting new investment, the critical functions of helping investors who have already decided to invest, and of providing feedback to the government about problems in the investment climate, are also being neglected. There is general consensus within the private sector, and indeed within the Government, that the existing investment approvals process in Aruba is not transparent and can be quite lengthy. FIAS heard many complaints of six-month lead times for obtaining licenses to commence business in the country. An appropriately staffed and funded promotion agency would be working on these problems as well.

174. FIAS has no doubt that Aruba needs to establish a full-fledged, adequately funded investment promotion unit, to promote and attract the investments that the country will require in order to achieve its economic diversification goals. It should be established along international best practice principles and function with the full support of the government. This unit need not be large or extremely expensive, but a good, "lean and mean" one will more than repay its costs, many times over.

175. There are today over 160 national investment promotion agencies and over 250 sub-national ones[16] fiercely competing for the same investors. The accumulated experience, performance and track record of this universe of organizations provides a valuable database of information, experience and lessons for a country that, like Aruba, is evaluating the possibility of an investment promotion strategy. And Aruba is not starting from scratch in this arena. It has valuable expertise and accumulated know-how from both the short-lived experience of the Aruba Foreign Investment Agency back in the 1990s, and the on-going efforts undertaken by the Department of Economic Affairs since then.

## B. What Do Investment Promotion Agencies Do?

176. In the competitive foreign investment environment, countries behave like companies in search of increased market share. Countries, like companies, have some degree of control and hence some ability to creatively use three variables in their overall marketing strategies: the 'product' which is the country itself as an investment site; the 'price' or cost to the investor of operating in the country; and the 'promoting' of the country as an investment site through information dissemination, investor facilitation, and other sales activities (See Box 1 – Marketing a Country).

[16] The Effectiveness of Promotion Agencies at Attracting Foreign Direct Investment, Jacques Morisset and Kelly Johnson, FIAS 2002

177. A strategic approach to investment promotion starts by addressing three key questions: "What to Promote", "Who is the Target Investor" and "How to Promote."

178. "What to Promote" depends on the investment supply and demand equation—i.e. what assets the country realistically has to offer in terms of its investment environment (e.g. physical and human resources, competitiveness of sectors, investment policy framework and governance, etc.) and the corresponding business opportunities investors are looking for. We addressed this question for Aruba in Chapter III – but a good promotion agency will be continuously checking and modifying such a view, depending on market response.

179. A good answer to the first question facilitates the task of determining "Who is the target investor" and will allow the IPA to segment potential investors and target those who are most likely to be interested in what the country has to offer.

**Box 1: Marketing a Country**

The "product", or the country itself as an investment site. Some aspects of the product—population, location and natural resources—are generally beyond the ability of the government to change. Other factors such as macroeconomic stability, investment regime, and social and physical infrastructure are more under the influence of government policy.

The "price", or the cost to the investor of locating and operating within the investment site. This includes the cost of accessing land, infrastructure and utilities, the effects of taxes and subsidies, and the administrative cost of various regulatory procedures that often increase overall business cost and do not always serve useful public functions.

The third variable is "promotion", or activities that disseminate information about or attempt to create an image of the investment site and provide services for the prospective investor. The idea is to sell the country's product and price advantages to potential investors. By its success or failure, promotion can also be a mirror for government to see whether its price and product are indeed competitive in the market; and what it learns in its contact with investors can be the source of highly practical advice for guiding policy adjustments.

180. Decisions on "How to Promote" are seldom made quickly, and are subject to review and adjustment over time. Choices must be made about the question just described above, "Who is the target investor?" And the agency must allocate its resources among the various functions of image building, facilitation, generation, and feedback to the government – which are discussed below. Initially, agencies focus on promoting selected sectors to investor countries and companies which are most familiar to them and which offer the best prospects for success. This approach is usually developed, expanded, and refined over time and with experience.

181. Such a strategic approach is a necessity for a country that, like Aruba, has only limited possibilities and also is in a position to determine what type of investment and investors it wants to attract and what type it doesn't need to attract. Aruba's successful tourism sector, infrastructure constraints, limited resources and limits on labor supply provide a clear framework that needs to be taken into consideration in order to develop an effective, sustainable and customized investment promotion strategy.

182. As a recent FIAS survey of 75 IPAs worldwide confirmed, nearly every national investment promotion agency engages in four basic functions of investment promotion. These functions are usually named as: image building, investment generation, investor servicing and policy advocacy. Each IPA will develop an investment promotion strategy that is basically a mix

of these four basic functions, designing the emphases on each and the specific activities in each category according to the situation of the country at the time and the agency's budget.17

183. Image building is the function of creating the perception of a country as an attractive site for international investment. Activities commonly associated with image-building include fact sheets, newsletters, reports, speeches, literature including a flagship brochure, general and targeted advertising, public relations events, and the generation of favorable news stories. Some of these activities, especially general advertising, can be quite expensive, and are often not very cost-effective. Experience indicates that, in order to provide tangible results, these efforts are seldom one-time shots but rather a sequence of consistent and complementary activities that form a comprehensive communication campaign.

184. The extensive use of image building activities to enhance a country's image abroad can be sensible and beneficial to investment promotion when it is conducted at the right time, but it can be wasteful and counterproductive if conducted too early and when the country in reality offers a "bad product" to investors. There is nothing more damaging to investor confidence than when credibility is lost through over-selling the virtues of the country with potential investors leaving because reality did not meet the expectations raised through such image building activities.

185. For a small country with limited sectoral scope for attracting investment, such as Aruba, a general image-building campaign is likely to be inefficient. Aruba would need to focus sharply any image building activity, designing it for an audience of the particular sectors and targeted investors involved in the agency's investment generation efforts.

186. Investment generation involves identifying potential investors who are likely to be interested in the country, developing a strategy to contact them, and working with them with the objective of having them take a close look at the country and, hopefully, commit to an investment. Specific techniques include: mail and phone campaigns, industry or sector-specific investment missions or informational seminars, in-bound and out-bound missions, direct marketing, and one-on-one presentations to individually targeted potential investors.

187. Making decisions on which companies, sectors and industries to target requires time, research, information, and experience. Investment generation requires careful planning and follow-up, and agencies need to be skilled in knowing when to use and how to use the different techniques. It also requires effective back up from other parts of the national and local government system. All in all, investment generation can be expensive and experience shows that it must be well done and well timed in order to produce results. Anything less than professional efforts run the risk of damaging the country's image.

188. This need for highly expert generation efforts is reflected in the recent FIAS survey of IPAs. This research showed that targeted investment promotion is typically the least effective of the four investment promotion functions, especially in countries with a relatively difficult investment climate. But this does not mean that targeted investment promotion is an ineffective

[17] See the classic description of these functions in Louis T. Wells, Jr. and Alvin G. Wint, Marketing a Country, revised edition, FIAS Occasional Paper 13, 2000

promotion tool. On the contrary, it can be highly effective if it is done with a high degree of sophistication and excellent, careful preparation. The lower effectiveness of this tool experienced by the typical IPA worldwide is a reflection of the difficulties involved in making targeted investment promotion work well, of the less-than-professional staff of too many IPAs, and of trying to make large marketing efforts make up for an unattractive product – which will never happen, because potential investors are professional, careful buyers and are seldom fooled. Investment generation will work only if the country can offer truly attractive opportunities relative to competitor locations. Naturally this requires, above all, a business climate that is investor-friendly.

189. Investor servicing is the core component of all investment promotion strategies – the most important and the most productive. Best practice indicates — and recent FIAS research supports -- that this function is frequently the most effective method for promoting FDI. Servicing may be conceived as divided into three components: pre-registration, implementation and post-investment services. It starts with pre-registration servicing, which focuses on assisting potential investors to get into operation as quickly as possible, including helping them to access information, organizing site visits, introducing them to organizations in the public and private sectors, helping them to obtain required clearances and permits from the government, and assisting them to overcome the numerous problems that arise in setting up investment projects. It continues through helping them as they set up their facilities and commence business, and should include investor tracking and follow-up procedures to enhance facilitation effectiveness. "The best advertisement is a satisfied customer" is the byword and *raison d'etre* of investor servicing.

190. Engaging in facilitation requires well qualified people who understand how to work with the ministries and government agencies involved in the entire investment process, including knowledge of all the potential permits, registrations, and approvals an investor may need to set up operations. In the course of assisting investors, the agency frequently becomes a leading authority on the weak points and slow stages of the investment process. This knowledge can make it an informed and effective advocate for investor-oriented public policy reform and streamlining of bureaucratic regulation and licensing procedures.

191. Policy Advocacy. IPAs are in charge of selling the 'product' which is the opportunities that their country offers to investors. IPA staff is uniquely positioned to receive a flow of feedback information from the international market of private investors on how the country compares to others as an investment destination, including the details of its strengths and weaknesses. The investor-servicing component also feeds the policy advocacy component with information about investors' problems and concerns. Best international practice involves the IPA, with strong private sector inputs, analyzing the strengths and weaknesses of the business climate as well as conducting strategic studies of the competitive advantages and disadvantages of the country in particular sectors. All this material forms the basis for well-informed feedback to the government as to what changes in laws, regulations, policies, administrative practices or attitudes are needed to boost the flow of investment. Authorities can tap into this information in order to strengthen existing policies or design new ones, which can help influence the price and quality of the 'product.' Just as executives of large companies cannot afford to ignore the feedback of their sales forces in understanding consumer preferences, government officials

should take note of feedback from the international investor market, and act on it where appropriate.

192. Nearly every IPA in the world carries out this function, but it does not get talked about explicitly very much and its importance is often underestimated. The recent FIAS research by Morisset and Johnson, cited above, shows that policy advocacy is probably the most effective investment promotion tool, but typically IPAs commit only small amounts of resources to this function. This is a strategic mistake, as the evidence suggests that improvements in the investment climate are the most effective way for a country to sell itself as an attractive investment location.

193. IPAs need to develop a capability and structure to implement this function, which requires a suitably qualified and experienced manager in this area and high-level political commitment in support of private investment and creating an investment climate conducive to attracting it. A successful agency would need to convince the government and the investment community that it is capable of performing the task, and carry the clout and status to have its views listened to in government formulation of new policies or policy changes.

## C. An Organizational Structure for Promotion of Aruba

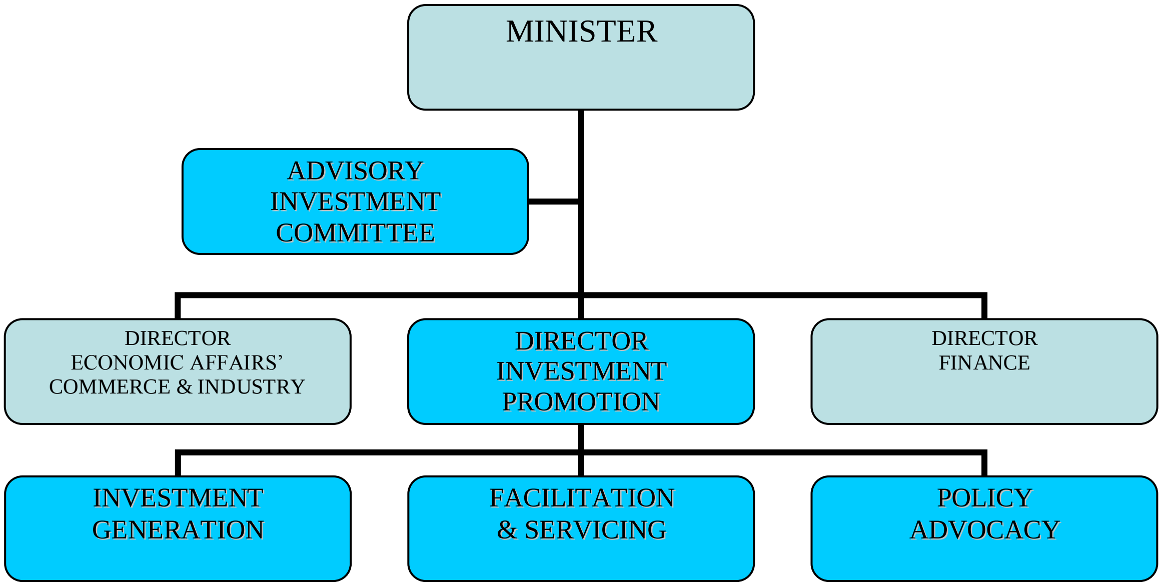
194. "Structure" refers here to two aspects of an investment promotion agency: (a) external, which is where it fits within the government, to whom it reports, who funds it, etc., and (b) internal, which obviously is its internal division into departments, internal lines of authority, etc.

195. IPAs worldwide have quite different external structures, being autonomous, within Ministries, within an Office of the President, etc.; their funding sources range among the government budget, aid donors, private sector businesses and/or associations, and sometimes others. Experience suggests that the structure most likely to lead to success is an autonomous agency, with its own by-laws and operating procedures (outside the civil service), reporting to a mixed public-private sector Board of Directors. However, there have been successful agencies with various different external structures.

196. FIAS does not, however, recommend that Aruba jump into an autonomous, stand alone agency at this time. Given Aruba's small size, limited range of sectors to promote, budget constraints, and recent history and existing skills, an appropriate start could be to establish the investment promotion agency as a "lean and mean" department within the Ministry of Finance and Economic Affairs. It might be named the Department of Investment Promotion or DIP. It should report to the Minister and have its own dedicated staff, offices, budget and responsibilities.

197. The proposed internal organizational arrangements of the DIP are shown in Chart I, below. As a department within the Ministry of Finance and Economic Affairs, it will be administered by a Director who will report to the Minister. Initially, the director will be supported by three professional and two support staff. This may expanded to four professionals and three support staff in the future, as may be required by the work load of the department.

**CHART 1: Organizational Arrangement of the Investment Promotion Department**




198. FIAS further recommends the establishment of an Investment Advisory Committee which will be responsible for advising on the new department's policy agenda and operational priorities. This Committee should be chaired by a proven and influential leader with significant private sector experience and a keen appreciation of the role that private sector investment plays in economic development. He/She should also command the respect of the Government, the private sector, and the other stakeholders. Other Committee members should be leaders from both the private and public sectors who have demonstrated leadership qualities and a propensity for being action- and results- oriented. The Committee should hold regular meetings and be consulted on all policy and strategy decisions of the DIP, including its budget. Assuming that the Committee and the DIP agree on most matters, the Committee should be a champion of the Department both within the Government and with the business community and entire nation.

199. As a first attempt at a mission statement for the new Department, FIAS suggests the following:

> ***The mission of the investment promotion unit is to participate actively in the economic development and diversification of Aruba, through investment promotion activities that focus on enhancement of the business climate, support to investors, and promotion of investments both in the country as a whole, and in specific highly-desirable economic sectors.***

200. As a new entity, a great degree of flexibility needs to be allowed the DIP, as it needs to adapt to uncertainties, feel its way, and develop in a useful way. Its size should be subject to fairly strict control, and its management should continuously evaluate the costs and benefits of outsourcing specific tasks, products and projects in order to maintain a manageable size of the organization. It will need sufficient budget flexibility to do this.

201. The agency will grow as it moves along its learning curve, sees the demand for its services and can better estimate what resources it needs to meet its objectives. For the first year, the structure could incorporate the following units:

202. The Director: In charge of the operations, strategic planning, and administration of the organization of the DIP. The fundamental responsibility of the Executive Director would be to provide leadership for the DIP – ensuring that the organization carries out its mandate effectively and serves the needs of its stakeholders.

203. The Policy Advocacy Unit: Responsible for all activities that relate to improving the business climate and removing administrative obstacles. It shall perform an analytical function that delivers technical support and recommendations to policy makers in relation to legislations and regulations that affect the investment climate. When requested it shall be in a position to deliver (using internal or external resources) advice to legislators. This unit could be lead by a lawyer that combines experience in the law-making process with a business mind. This individual should have the credentials and credibility required to interact at the highest level with governmental institutions and business groups. An international perspective is also an asset, because potential investors will evaluate the quality of the legislative reforms by comparing them to international best practices.

204. The Investor Servicing Unit: Devoted to support all potential investors in their decision making process in Aruba. Key responsibilities include:

- Meet with potential investors and provide assistance from the initial contact until the investment is made and afterwards;

- Track all requirements and status of potential investors; anticipate their needs and respond to their requests;

- Create an information center and database with all relevant elements. This information should be structured and presented in such a way that it can be accessible on the DIP's website, thereby significantly reducing the workload of the Department;

- Develop links and alliances with government officials that have to deal with investors during their administrative procedures process;

- Communicate to the policy advocacy unit any findings and obstacles identified during their day-to-day work.

205. The manager of this unit ideally should either come from the private sector, or at least have some private sector experience. He/she has to understand the language of the investor and understand his motivations and behaviors. This is a service-oriented unit and as such it should be in a position to deliver to its client-base (potential investors) the best possible service. The manager should have the skills to anticipate and rapidly understand the requirements of investors and provide a professional response to such needs or requests.

206. Investment Generation Unit: Responsible for identifying sectors and potential investors that are likely to contribute to the economic diversification of the island, and contacting those investors to interest them in investing in Aruba. These potential investors may be foreign, or Citizens of Aruba living on the island or abroad. This person can start with the FIAS analysis in Chapter III and elsewhere in this report, add his/her own expertise about Aruba as well as that of his colleagues at the Department and on the Advisory Committee, and continuously sharpen the targeting of the unit's efforts. He/she shall design and execute the work of generating interest in Aruba on the part of specific investors in targeted activities.

207. The pool of existing know-how and specialized personnel presently working on promotion and related activities within the Department of Economic Affairs may well be a good source for some of these positions.

208. The Director and Advisory Committee of the DIP should consider the utility of receiving specialized technical assistance in the area of IPA management, strategy implementation and investment generation. FIAS, MIGA, WIPA, UNCTAD, and/or other international agencies may be able to provide guidance on this point. External support could be useful in speeding up the learning curve and in assuring that the new Department exploits, fully and from the start, the knowledge available from international experience in IPA management all over the world, for the last several decades.

## D. Towards an Initial Strategy

209. A clear, focused and results-oriented strategy is the cornerstone of success for any operational unit. For the new DIP, a strategy should be informed by the answers to questions such as:

- who are our potential customers? (local or foreign investors, Latin America, USA, Holland, other Europe, large or small, sector specific…),
- what does Aruba offer these customers? (general investment platform, platform for export, local market; skilled workers, low taxes, good access to finance, excellent law and order and a secure environment, location advantages…)
- how do we plan to reach our customers? (broadly targeted image promotion, trade fairs, conferences, missions, personal visits…)

210. Any strategy will be a specific mix of the four basic investment promotion functions that were previously described: policy advocacy, image building, investor servicing, and investment generation. The DIP's first and most important task will be to design its strategy. The agency, its

management and stakeholders will have to allocate resources to this task and should avoid undertaking other activities prior to its completion. If possible the strategy might be developed, discussed and approved prior to the official launching of the agency in order to reduce external pressures and expectations.

211. FIAS suggests that Aruba's DIP might adopt an initial strategy that emphasizes five initial objectives:

- Reduce the cost of doing business in Aruba by focusing on policy advocacy functions;

- Facilitate the investment decision process by building world-class investor servicing capabilities and resources;

- Evaluate the international competitiveness of niche-segments for investment promotion (as we attempted to do in Chapter III), in preparation for future investment generation activities;

- Position the agency as the voice of investors by building effective links with Aruba's existing private sector, monitoring their opinions and perceptions and beginning to give feedback to the Government;

- Develop relationships and alliances with key actors in the areas of policy reform, sector specific expertise and administrative procedures.

212. For the intermediate run – say, the next three to four years, FIAS recommends the following elements of strategy:

213. Significant focus on investment generation: By focusing on generating investment in desirable new sectors, the unit will address the country's key concern and objective in terms of sustainable economic development and risk reduction through diversification. Investment generation activities do not provide tangible results in the short term. The time between initially contacting a potential investor, his decision to invest, and the implementation of that investment is measured in years. So it will take a consistent, medium-term and coordinated effort to produce results. Aruba will need to structure a multi-year plan and allocate the adequate resources in order to generate the desired investments in something like a 5-year horizon.

214. Policy advocacy: Aruba has long been perceived as an attractive investment location, mainly for hotels and related tourism facilities. Large investment inflows in this sector during recent times confirm this. However, very little diversification took place, and according to the FIAS analysis in this report, the business climate includes many important weaknesses in attracting such new kinds of investment. Such concerns should be evaluated by the DIP, as soon as possible and on a continuing basis, so that it can furnish good advice to the Government and the Legislature about changes in Aruba's investment climate that may be needed to achieve the desired diversified growth.

215. The DIP will of course not be a policy maker; its role will be to advise, support and provide the perspective of investors to the institutions that have this responsibility. The DIP will carry the voice of investors to legislators, lawyers and governmental offices responsible for drafting, discussing and approving laws. The DIP can also identify best practices and outsource technical expertise to support policy makers, acting as “lobbyists” in order to communicate to all relevant audiences the risks and/or benefits of a specific reform initiative.

216. Image promotion is not included in the initial strategic mix: Aruba presently has a positive image among audiences that know it. No proactive, sustained efforts in broadly-targeted image promotion are presently required beyond those normally undertaken by the tourism promotion authority. For investment promotion, what is needed is a rifle approach more than the shotgun effort. The DIP must focus on specific key target audiences -- trying to advertise to a general audience would be both more expensive and less effective.

217. Investment promotion officials will be tempted by invitations to participate in international seminars, make presentations in regional conferences, and support government officials in international visits. The unit should rapidly learn that each one of these events is resource-intensive not only in time but also in money. In order to maintain its operational efficiency, it will have to differentiate and select only those that are aligned with its strategy. IPAs need to learn to say no, and to have the political independence to do so.

218. Become the preferred service partner for potential investors: At the present moment a number of organizations, including the Chamber of Commerce, the Economic Affairs Department, and the Department of Foreign Affairs are all undertaking activities to support potential investors. Such a widespread, uncoordinated effort is neither the most effective nor the most efficient way to service these investors. Aruba needs to concentrate its investment promotion efforts in one service-oriented, professional and well-connected unit that will be uniquely devoted to that task.

219. Nevertheless, to successfully deliver investor services, the DIP will need support and cooperation from a wide range of people and organizations, certainly including those just mentioned. To achieve this difficult combination of results will require great skill and focused effort on the part of the Director, and active collaboration of the individuals on the Advisory Committee – which probably should include officials from these other relevant organizations. It is crucial that the DIP be credible as the lead entity for promoting investment in Aruba, and to do this it needs to co-operate with other important sections in Government and the private sector -- such as financial institutions, legal and accountancy bodies, and chambers of commerce.

220. Develop an investor information system: An essential component of investor servicing is the development of an up-to-date, accessible investor information system for potential investors. Initial feedback from investor companies indicates that there is an unsatisfied need for general and specialized information to support investment decision-making. Aruba also lacks a highly visible and easily accessible focal point for potential investors looking for information.

221. The DIP will need to be able to provide potential investors with basic information about Aruba. Companies require a considerable amount of information before making their investment decisions. During the early stages of examining a potential investment, when the company may

also be considering a number of alternative countries, much of the information required may be of a general nature.

222. The Blue Book, Your Guide to Industrial Development in Aruba, published by the DEACI, is the starting point for this information system. It should be expanded in ways that investor inquiries will suggest, kept absolutely up to date (this is crucial!), and made available on a high-profile web site maintained by the DIP. Among the ways it should be expanded is the creation of a set of short sectoral profiles, each of which explains why Aruba is an attractive place for investments in one particular sector or branch of economic activity. Each of these profiles would of course have to contain all data relevant to the activities, such as availability and costs of relevant factors (land, certain kinds of labor, power, telecoms, access to markets, etc.). A summary of relevant laws, regulations, and Ministries or other regulatory bodies should also be included.

223. Once a company shows some serious interest in investing in Aruba, it will require more detailed sector and project information specific to the locations in the country it is evaluating. Best practice investment promotion agencies, such as those in Ireland and Singapore, make significant efforts to meet the information requests of companies as much as is reasonably possible. There are certainly limitations to this approach, and the agency needs to stop short of devoting significant resources to highly-specific project information. It should not try to compete, or replace, private consulting services that are available from lawyers, accountants, and other business consultants. But any type of information that relates to general market and investment conditions, even when specific to particular sectors, should be gathered and made easily accessible. For this purpose, the DIP should build up a database of the information needs of investors.

## E. A 3-year Business Plan

224. It is obviously premature to fully develop the components of a business plan for an institution that has yet to be created but, as in the case of the strategic mix, it is already possible to provide a draft version of such plan that could serve as a starting point for the stakeholders of the agency.

225. The main priority during the first year is inescapably the setting-up of the DIP itself. The appointment of the Director is just the first step in this direction. Then comes the definition of the strategy (in case it was not developed prior to the set-up of the unit as previously recommended), determining the organizational structure, hiring and training the staff, and defining organizational and administrative procedures. This will require time and resources from the management and will reduce the available time to carry on the functional activities. As was previously mentioned, Aruba is not starting from scratch in investment promotion -- there is already a good knowledge base and experience in units such as the Department of Economic Affairs and in individuals who have worked in this area for many years. These resources provide a very valuable initial platform that can shorten the learning curve and permit earlier action on some specialized functions such as investment generation.

226. Table 4 on the following two pages presents a time-phased program of suggested activities, programs and products that could be developed by the DIP, based on the strategic mix previously described.

**Table 4: Elements of a Three-Year Business Plan for the Proposed Department of Investment Promotion**

| | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| **Main Focus** | Institutional Set-Up<br>Investment Climate assessment<br>Create the knowledge base | Investment Generation | Investment Generation |
| **Organization** | Organizational design<br>Staffing and Training<br>Evaluate feasibility and benefits from specialized external consultancy support<br>Identify key players and build strategic alliances | | |
| **Image Promotion** | Begin improving the investor information system, especially in regard to non-sector-specific information<br>Strengthen content and accessibility of website | Complete the strengthening of the investor information system, including sector-specific information packages<br>Analyze positioning of other countries in the region | |
| **Investor Servicing** | Track, review and evaluate the existing historic data on investment servicing performed by the different institutions (Ministries, Chamber of Commerce)<br>Contact and appraise concerns of investors that are presently investing<br>Build formal and informal inter-institutional mechanisms for investor servicing purposes<br>Create an information center with all relevant elements for investors and doing business in Aruba<br>Build a website information system. This will require a detailed analysis of existing IPAs websites in order to determine the best content structure for Aruba. In this case Aruba can certainly benefit from the experience of other countries | Review all investor servicing activities of year 1 in order to identify patterns and trends and implement follow-up actions<br>Implement a customized investor tracking system<br>Implement red alert system to identify very important investors and provide special service support<br>Develop Investor Information System | Review all investor servicing activities of year 2 in order to identify patterns and trends and implement follow-up actions |
| **Investment Generation** | Evaluate potential sectors<br>Select Target areas to promote<br>Skill building activities related to investment generation activities<br>Prepare investment generation plan for selected areas for the next 2 years | Implement First Stage of Investment Generation Plan<br>Produce specialized and focused promotional material<br>Implement the required resources and staff | Review results of previous year activities and make adjustments to Second Stage<br>Implement Second Stage of Investment Generation Plan |

| | | | |
|---|---|---|---|
| **Investment Climate** | Gather, analyze and evaluate all existing information on administrative barriers and obstacles to investment.<br>Evaluate existing incentives scheme<br>Use the information to prioritize issues and problems. This could be done using a survey of existing investors and relevant organizations. The survey will also help in positioning the unit among audiences. Execution of the survey could be outsourced to a specialized consultant<br>Based on the priorities define specific concrete objectives for policy reform<br>Create Legal Committee to incorporate external expertise<br>Implement Policy Advocacy plan for Year 1. Such plan could be called the Cost of Doing Business in Aruba Project<br>Build alliances with key audiences and policy-makers | Review Policy Advocacy Plan of Year 1<br>Implement Policy Advocacy plan for Year 2<br>Pay special attention to issues that affect priority investment sectors<br>Analyze conditions in other countries in the region<br>Evaluate benefits of in-depth administrative barriers analysis | Review Policy Advocacy Plan of Year 2<br>Make survey to key audiences to monitor perceptions and confirm priorities<br>Implement Policy Advocacy plan for Year 3<br>Analyze feedback from potential investors that did not invest after initial contacts |

## F. Budget and financing

227. The DIP should be established as a very lean institution with a modest but adequate operational budget. The activities associated with investment generation/promotion generally include: promotional brochures and web site development and maintenance, general and targeted advertising, public relations events, the generation of favorable news stories, mail and phone campaigns, industry or sector-specific investment missions and/or informational seminars, in-bound and out-bound missions, direct marketing, and one-on-one presentations to individually targeted potential investors. These must be done well; amateurish efforts will send the wrong signal about Aruba's business climate, and the country would be better off with nothing than with poor promotional materials. Many of these activities therefore can be expensive, especially since they have to be carried out on a sustained basis over several years to achieve results.

228. The projected expenditure for the DIP, over a three-year period, is summarized in Table 5. Salaries and emoluments are projected to increase by approximately 33% percent in the second year as the Department recruits more staff to improve its operating capability. Capital expenditure, by contrast, will be highest in the first year as the DPI acquires the equipment necessary to carry out its mandate.

**Table 5: Expenditure Budget for the DIP (US$)**

| Categories of Expenditure | Year I | Year II | Year III |
|---|---|---|---|
| *Recurrent Expenditure* | | | |
| Salaries & Emoluments | 300,000 | 400,000 | 400,000 |
| Rent | 80,000 | 80,000 | 80,000 |
| Utilities | 10,000 | 10,000 | 10,000 |
| Telecommunications | 60,000 | 60,000 | 60,000 |
| ***Total Recurrent Expenditure*** | ***450,000*** | ***550,000*** | ***550,000*** |
| | | | |
| *Investment Promotion Budget* | *450,000* | *450,000* | *450,000* |
| ***Total Operating Expenditure*** | ***900.000*** | ***1,000,000*** | ***1,000,000*** |
| | | | |
| *Capital Expenditure* | | | |
| Furniture & Fixtures | 50,000 | | |
| Computers & IT | 50,000 | | |
| ***Total Capital Expenditure*** | *100,000* | *25,000* | *25,000* |
| **Total Budgeted Expenditure** | 1,000,000 | 1,025,000 | 1,025,000 |

229. Abstracting from the details, a budget of about US$1 million per year for three years is close to a minimum requirement.

230. In Aruba's situation, substantial funding from donors seems unlikely. Some agencies try to earn part of their financial needs by providing services to their clients, but to FIAS' knowledge, there has never been a single successful example of an IPA earning any significant amount of its budget in this way. To the contrary, such efforts often lead to conflicts of interest (actual or perceived), alienate investors who are accustomed to receiving these services free of charge, and end up damaging the image of the country.

## G. Critical Success Factors

231. Experience shows five factors that are crucially important to the success of an investment promotion agency:

232. Mandate and legal charter**:** A clear mandate for the DIP is a requirement for its success. It should be established by law (experience in Aruba already shows the problems that often occur when an agency has a weaker, more easily revocable foundation). Beyond this, there needs to be a definitive, multi-year commitment from the main stakeholders to support and cooperate to achieve the DIP's mission and objectives. It will be essential to count on support from the Ministries and other governmental institutions, the Chamber of Commerce and the private sector. Investment promotion is a plant that takes several years to bear fruit.

233. Financial commitment: Adequate financial support is essential in ensuring stability and sustainability of a professional, effective and proactive development entity such as the DIP. The Government must be prepared to assume an important role in the funding of operations of the Department. It must be recognized in advance that the will and commitment of the Government and the private sector, combined with a strong and effective organization, are key requirements for the success and the sustainability of an initiative such as the DIP.

234. Public / private participation**:** Experience with the most successful investment promotion agencies demonstrates the obvious benefits of a collaborative public/private strategic direction.
235. Public participation will provide the DIP with the official status and recognition required to implement its mandate. Its links with government help to ensure coordination with other governmental bodies involved in the approval and licensing process. On the promotional side, the government can support and complement the promotional efforts by means of foreign representation through the government's foreign relations offices and commercial representatives.

236. The private sector will bring a business perspective to the equation. It provides valuable national and commercial insights to the strategic direction of the agency through its participation at the Advisory Committee level. At an implementation level, private sector representatives should frequently participate in commissions and working groups (focus groups) to assist the DIP in the development and improvement of its business and marketing plans, and provide valuable feedback based on their experiences.

237. Full spectrum of services**:** Investors considering an offshore investment are faced with the arduous task of evaluating investment locations, obtaining factor costs, assessing the business climate, determining the appropriate investment regime and many other factors related to their investment decisions. Successful agencies have discovered the value of providing a full spectrum of investment promotion, facilitation and aftercare services to investors. These services initially begin with the provision of information and customized research. As the evaluation process advances, the IPA provides facilitation services, organizes and attends investor site visits, provides follow up, assists investors in obtaining land, buildings, permits and operation licenses. Finally, once installed, aftercare services help ensure that investors are satisfied, which in turn positions the agency to address investors' future expansion and diversification plans. For the DIP to be successful, it should be designed to address these issues and be able to provide a full spectrum of services competitive with the leading agencies worldwide.

238. A good product: Finally, the most important ingredient of all – the *sine qua non*, the absolutely indispensable requirement for the success of an investment promotion agency – is a good investment climate. The agency cannot do more than speed up the action of the market. It cannot persuade investors to come where they face too many difficulties, or too much risk and uncertainty, or too hostile a regulatory or tax climate. The country must offer real economic advantages, and a business climate that is conducive to investment, operation, and expansion of private businesses. Only then can a promotion agency inform and persuade potential investors to come to the country.

# APPENDIX A

# TAX SYSTEM ANALYSIS

This appendix provides (1) some details on Aruba's tax system and how it was modeled in the METR analysis, (2) details of the METR calculations for the eleven assets defined by the tax law under current law, (3) details of the METR calculations for the same eleven assets for a firm with IPC status, (4) an explanation of how the METRs for the five potential investments presented in the report are calculated from the individual asset METRs, (5) background information on the construction and applications of METRs, including the mathematical equations underlying the METR analysis.

## Details of the Tax System

### *Treatment of Non-Depreciable and Depreciable Assets*

The income tax system defines quite a few different classes of assets for tax purposes (more than the typical tax system) and differential import duties implicitly create several additional classes of assets. For purposes of the METR calculations presented in this report, assets under Aruba's tax system are divided into eleven classes. The tax treatment of these assets is described below and summarized in Table A.1.

### *Inventories*

The cost of inventories can be calculated using either the "First-In, First-Out" or FIFO method or the "Last-In, First-Out" or LIFO method. However, since LIFO is generally the approach that minimizes tax liability since inflationary increases in the value of inventory are not taxed, and since it is used by many (although certainly not all) companies, the METR calculations assume the use of LIFO inventory accounting. To the extent that firms use FIFO accounting and are thus (voluntarily) subject to taxation of inflationary gains on their inventories, the calculated METRs for investment in inventories will be understated. However, since the inflation rate in Aruba is relatively low (on the order of 3 percent), any resulting errors will be relatively small. The calculations also generally assume that the items that comprise inventories are imported rather than produced locally, and subject to the standard 7.5 percent import duty; however, preferential treatment of imports of inventories for a refinery expansion project implies they are exempt from this duty

### *Land*

Like inventories, land is not a depreciable asset, and therefore should not receive any deductions for depreciation under an income tax. Nevertheless, under the current profits tax in Aruba, purchases of land are allowed an immediate deduction for "accelerated depreciation" (such a deduction is typically referred to in the literature as "partial expensing") equal to 33 percent of the value of the purchase. Land is also subject to property taxation at a nominal rate of 0.4 percent of assessed value. However, the effective property tax rate appears to be lower than the nominal rate, as assessments occur only once every five years, and there appears to be a systematic tendency for underassessment. As a rough adjustment for these factors, the METR calculations assume that the actual effective property tax rate is 0.2 percent. In addition, transfers of property are subject to a property transfer tax of 3 percent.

### *Structures*

Purchases of structures (like all depreciable assets) also receive a deduction for "accelerated depreciation" or partial expensing equal to one third of the value of the structure. Tax basis for purposes of calculating future depreciation allowances is adjusted for this deduction. In addition, structures receive a supplemental "investment allowance" of 12 percent of the value of the purchase in each of the first two years of the investment; moreover, tax basis for depreciation is not adjusted for these allowances.[18] The salvage value of structures is assumed to be 10 percent of the original value, and the tax basis of an investment in structures is reduced by its salvage value and then depreciated straight line over 40 years. Thus, the pattern of deductions per dollar of investment in structures is 0.33+0.12+(0.57/40) in year one, 0.12+(0.57/40) in year two, and (0.57/40) in years three through forty. Note that since tax basis is not reduced to reflect the investment allowances, these deductions sum to 1.14 (rather than 0.9 as they would if tax basis were adjusted for both salvage value and the investment allowances). For the METR calculations, investments in structures are also assumed to be subject to property taxation at an effective property tax rate of 0.2 percent and a property transfer tax at a rate of 3 percent.

### *Machinery and Equipment*

Purchases of machinery and equipment also receive a deduction for accelerated depreciation or partial expensing equal to one-third of the price of the asset, with a tax basis adjustment, and an investment allowance of 8 percent of the purchase price of the asset in each of the first two years of the investment, without a basis adjustment. The salvage value of machinery and equipment is assumed to be 10 percent of the original price and the asset is depreciated straight line over 10 years. Purchases of machinery and equipment, almost all of which are imported, are generally subject to the standard import duty of 7.5 percent, which is the rate assumed for the METR calculations; however, preferential treatment of imports of machinery and equipment for a refinery expansion project implies they are exempt from this duty.

### *Renovations*

The profits tax has a somewhat unusual asset classification referred to as "renovations." This is a catchall category, presumably designed primarily for hotel renovations. To the extent any renovations are not treated as structures (and thus subject to the tax treatment described

[18] The taxpayer has the option of deferring the deduction for accelerated depreciation and the investment allowances, which are available only for investments in excess of 5000 Aruban florin (about $2,800 US). The METR calculations assume that the investing firm maximizes the value of these deductions by taking them as soon as possible — that is, in the first two years of the investment — and that the amounts invested exceed the 5000 florin floor.

above), renovations receive a deduction for accelerated depreciation or partial expensing equal to one-third of the cost of the renovations, with a tax basis adjustment, and an investment allowance of 8 percent of the purchase price of the asset in each of the first two years of the investment, without a basis adjustment. Renovations are depreciated straight line over 10 years and are assumed to have no salvage value. Many of the inputs to a renovation are imported and are subject to import duties that vary from 7.5 to 22 percent. The METR calculations assume an average import duty of 15 percent for renovations.

### *Furniture*

Purchases of furniture receive a deduction for accelerated depreciation equal to one-third of the price of the asset, with a tax basis adjustment, and an investment allowance of 8 percent of the purchase price of the asset in each of the first two years of the investment, without a basis adjustment. The salvage value of furniture is 10 percent of the original price and the asset is depreciated straight line over five years. Purchases of furniture, almost all of which is imported, are subject to an unusually high import duty of 22 percent, which is the rate assumed for the METR calculations. (This high rate is apparently a carryover from the days when Aruba was part of the Netherlands Antilles where a high customs rate was applied to imports of furniture to protect the furniture manufacturing industry in Curacao – clearly an irrelevant consideration at the current time.)

### *Office Equipment*

Purchases of office equipment receive the same tax treatment as purchases of furniture, except the relevant import duty is 7.5 percent. Again, preferential treatment of imports of office equipment for a refinery expansion project implies they are exempt from this duty.

### *Computers*

Purchases of computers receive the same tax treatment as purchases of office equipment, except they are depreciated over only three years (rather than five).

### *Computer Mainframes*

Purchases of computer mainframes receive a deduction for accelerated depreciation equal to one-third of the price of the asset, with a tax basis adjustment, and an investment allowance of 8 percent of the purchase price of the asset in each of the first two years of the investment, without a basis adjustment. Computer mainframes are depreciated straight line over eight years and are assumed to have no salvage value. Except for the case of the refinery expansion project where they are tax exempt, purchases of computer mainframes are subject to the standard import duty of 7.5 percent.

### *Cars*

Purchases of cars receive a deduction for accelerated depreciation equal to one-third of the price of the asset, with a tax basis adjustment, and an investment allowance of 8 percent of the purchase price of the asset in each of the first two years of the investment, without a basis adjustment. Cars are depreciated straight line over three years and are assumed to have a salvage value equal to 15 percent of the original purchase price. Car purchases are subject to relatively high import duties that range from 30-50 percent; the METR calculations assume an average import duty of 40 percent.

### *Trucks and Buses*

Purchases of trucks and buses receive the same tax treatment as cars, except that they are depreciated over 10 years and are subject to an import duty of 12 percent.

## Withholding Taxes and Personal Taxes on Interest and Dividends

New withholding taxes were also introduced under the new fiscal regime. The standard dividend withholding tax rate is 10 percent. However, this rate is reduced to 5 percent if (1) at least half the shares of the distributing company are listed on a "recognized" stock exchange (as determined by the Minister of Finance and Economic Affairs), or (2) if the shares are owned by a company listed on a recognized stock exchange. The dividend withholding rate is zero if the recipient is a company that qualifies for a "participation exemption," which requires ownership in the distributing company if the recipient firm is resident in Aruba, or active (non-portfolio) ownership of the distributing firm if the recipient is resident abroad and subject to an income tax in its country of residence. There is no withholding tax on interest payments. At the individual level, dividends received are taxed at a flat rates of either 25 percent (for closely held corporations or an IPC) or at 30 percent (for all other dividends), with a credit for tax withheld, while interest income is taxed at ordinary personal income tax rates, which range up to 62 percent. Interest and dividends are, however, apparently subject to significant under-reporting, so that the extent to which such payments are subject to individual level taxation is unclear. Accordingly, the METR calculations are done for three cases — one with no withholding or personal income taxation, one with a significant amount of withholding and personal income taxation (a combined rate of 25 percent on dividends and 35 percent on interest income), and one with only a modest amount of withholding and personal income taxation (a combined rate of 5 percent on dividends and 10 percent on interest income).

## Inflation Rate and Other Parameters

Aruba has enjoyed relatively moderate inflation in recent years, with inflation rates in the neighborhood of three percent; this is the rate generally assumed in the METR calculations, which also assume a nominal interest rate of eight percent and an equity premium of 5 percent. Economic depreciation is assumed to be exponential for all depreciable assets, at rates that reflect recent estimates of economic depreciation in the U.S.[19] The rates of economic depreciation used are 3 percent for structures, 15 percent for machinery and equipment, 12 percent for renovations and furniture, 30 percent for office equipment and computers, 20 percent

19 Although these figures are plausible, they are nevertheless quite tentative since there are no data on actual depreciation rates in Aruba.

for computer mainframes,[20] 33 percent for cars and 25 percent for trucks and buses. The fraction of investment financed with debt in most of the calculations is assumed to be 50 percent, which appears to be a fairly typical (although perhaps somewhat low) debt-asset ratio for a new investment in Aruba.

## Three Issues Not Considered in the METR Calculations

Three additional issues that are not considered in the METR calculations should be mentioned. First, the new fiscal regime includes provisions that deny deductions for interest expense and purchases of inputs under certain circumstances. For example, deductions for interest paid to related foreign entities are denied unless the recipient is a resident of a country in which interest income is taxed at a rate of at least 5 percent, and deductions for input purchases from a foreign firm are denied unless the firms is listed on a recognized stock exchange. These rather harsh provisions are presumably meant to reduce opportunities for tax avoidance and evasion and not to deny legitimate deductions. Accordingly, they do not play a role in the METR calculations. However, to the extent that these provisions have the effect of denying legitimate deductions, they would dramatically (and inappropriately) increase the METRs reported in this paper.

Second, casinos typically qualify for tax holidays as part of a hotel, but also pay license fees and a special tax of four percent on a measure of gross receipts (although the calculation of the appropriate measure of gross receipts has for some time been the subject of considerable controversy). This tax is also not considered in the METR calculations.

Third, Aruba also has a tax on purchases of foreign exchange that is assessed at a 1.3 percent rate. Although the use of taxes on various financial transactions is spreading, especially in Latin America, these taxes are generally perceived by public finance economists as highly undesirable. Such taxes increase the cost of capital and do so in an erratic manner depending on the demands for foreign exchange and differential cascading effects across industries, encourage financial disintermediation, distort production decisions since they apply only to certain transactions and to intermediate as well as final transactions, and encourage a wide variety of wasteful avoidance and evasion activities designed to minimize the number of transactions subject to tax. For these reasons, serious consideration should be given to eliminating the tax on purchases of foreign exchange, especially within the context of the reform package discussed in the final section of this paper.

## METRs by Asset Under Current Law

The results of the METR calculations under current law are most clearly understood if several preliminary calculations that highlight specific features of the tax system are first analyzed, with additional features added sequentially. To focus initially on the corporate profits or income tax, suppose that all other taxes in the system, including withholding taxes on

[20] U.S data do not distinguish between depreciation rates on computers and mainframes. The figure for economic depreciation of mainframes is obtained simply by assuming that computer mainframes depreciate at a rate equal to two-thirds the rate of other computers.

dividends, are zero. To abstract initially from the well-known tax advantage of full interest deductibility with debt finance especially in the presence of inflation, suppose further that all investments are entirely equity financed, and that the inflation rate is zero. Finally, to isolate the effects of the deductions for depreciation (including accelerated depreciation) from those of the special investment allowances, suppose initially that all investment allowances are zero.

Under these circumstances, the METRs associated with the current income tax are given in column (1) of Table A.2. These figures show the effects of the corporate tax without investment allowances or withholding taxes. The effective tax rate on investment in inventories, which do not depreciate and receive no depreciation allowances, is simply the statutory tax rate of 35 percent. By comparison, the METR on investment in land, which also does not depreciate but benefits from a deduction for "accelerated depreciation" equal to one-third of the purchase price, falls to 26.5 percent. The METRs on the remaining assets vary between 18.7-37.5 percent, reflecting in each case the extent to which the present value of the combination of accelerated and normal depreciation over the life of the asset corresponds to the present value of actual economic depreciation (as implied by the assumed economic depreciation rates). One reasonable benchmark for evaluating the depreciation deductions under Aruba's law is to assume that accelerated depreciation is a tax preference that is designed to lower METRs to that applied to investment in land (26.5 percent). By that standard, the depreciation allowances for renovations and furniture are somewhat too accelerated (METRs of 20.5 and 18.7 percent), too slow for cars and especially for trucks and buses (METRs of 31.2 and 37.5 percent), and approximately correct for the remaining assets (METRs that range from roughly 22-30 percent).

The effects of inflation on METRs are shown in column (2) of Table A.2. With all equity finance, inflation unambiguously increases METRs for all depreciable assets, as the present value of future deductions for depreciation is reduced. Thus, the METRs for non-depreciable inventories and land are unchanged (recall that the use of LIFO inventory accounting is assumed so that inflation does not affect the effective tax rate on investment in inventories), while the METRs on all the other assets increase, but only modestly (roughly by 1-3.5 percentage points) since the inflation rate in Aruba (approximated at 3 percent) is relatively low. Note, however, that the distortions of investment allocation decisions implied by these METRs are considerable, as the effective tax rates vary from 20-40 percent.

The effects of adding the investment allowances, which apply to all depreciable assets, that is, all assets except inventories and land, are shown in column (3) of Table A.2. The effects of these investment allowances are dramatic, both because they are relatively large (either 8 or 12 percent of the purchase price of the asset in each of the first two years of the investment) and because tax basis for depreciation purposes is not adjusted for the investment allowances, which implies that firms are effectively able to write-off more than 100 percent of the cost of the asset over its life. Thus, the investment allowances significantly reduce the METRs on depreciable assets (by roughly 9-24 percentage points) and create even larger tax differentials across assets, thus further distorting the allocation of investment across types of assets. Indeed, METRs with investment allowances range from nearly zero (2.2 percent for investment in computers) to the statutory rate of 35 percent for investment in inventories. Investments in inventories and land (which do not get investment allowances) and in trucks and buses (which get relatively slow depreciation) are taxed relatively heavily, at rates that vary from 26-35 percent. By comparison, investments in renovations, furniture, office equipment, computers, mainframes and cars are taxed relatively lightly, at rates that vary from 2-11 percent, while investments in structures and machinery and equipment are taxed at an intermediate rate of roughly 18 percent. Note that all of the METRs on investment in depreciable assets are below the benchmark rate of 26.5 percent, except for the METR on investment in trucks and buses, which is relatively high at 27.2 percent, reflecting the comparatively slow deductions for normal depreciation allowed for trucks and buses under current law.

The calculations thus far have assumed all equity finance. However, the use of debt finance is prevalent in Aruba, partly because of the tax advantage of interest deductibility. The METRs in column (4) of Table A.2 assume 50 percent debt finance, which appears to be a fairly typical (although perhaps somewhat low) debt-asset ratio for a new investment in Aruba, without taking into account any withholding or personal taxation of dividend or interest income. These figures show that the use of debt finance dramatically reduces METRs under these circumstances, both because interest is deductible (while dividends paid are not) and because the inflationary component of interest expense is deductible as well as the real component (in principle, only the latter should be deductible). As a result, the METRs are lowered significantly for all assets, by roughly 14-30 percentage points, and indeed are negative for most investments; these METRs range from -26.7 percent for computers to 20.1 percent for inventories. Thus, as is typically the case, the corporate income tax, by allowing deductions for interest payments but not for dividends paid, distorts investment financing decisions by creating a sizable tax bias favoring debt finance.[21] In addition, the differentials across assets are still large (METRs vary from -9 to 20 percent), while the general pattern of METRs across the various types of assets is the same as described above.

These results, however, understate METRs in those cases in which either withholding taxes or other taxes at the saver level (e.g., under the personal income tax) apply to dividends or interest received. It is difficult and inevitably somewhat arbitrary to model these taxes, since they vary considerably depending on the specific circumstances underlying any particular investment. The results in columns (5) and (6) attempt to provide an indication of the implications of withholding and personal income taxes for the combined tax burden due to corporate, withholding and individual level taxes. Consider first column (5), which presents results for the case of "high" withholding and personal income taxes. Specifically, it assumes that all equity profits are fully distributed and taxed at a flat rate of 25 percent (with full crediting of any withholding taxes), and that all interest income is taxed at an average individual tax rate of 35 percent. In this case, the generous tax treatment of investment under the current profits tax is offset by taxation at the individual level, and the benefit of deductibility of interest expense is fully offset by the taxation of interest income. As a result, METRs are quite high, ranging from 24-52 percent. Thus, to the extent that dividends and interest are taxed at such rates, the tax burden on investment approximates that implied by the statutory corporate tax rate of 35 percent, with considerable variation in METRs about that level (the range of differentials is still quite large, with the same pattern as described above).

These results, however, presumably overstate actual METRs in most cases, especially if taxes on dividends above the applicable withholding rate are deferred for a long period (e.g., because they are held in an untaxed foreign account or by an untaxed foreign entity) or the dividends are never reported, and if interest receipts are similarly deferred or under-reported.

[21] By assuming a fixed debt-equity ratio, the analysis effectively constrains the use of tax-favored debt finance. In reality, higher debt-equity ratios would increase the riskiness of investment and eventually result in higher interest rates (assumed constant in this analysis) that would reduce the attractiveness of debt finance.

The results in column (6), which reflect the case of "low" withholding and personal level taxes, attempt to capture these factors by assuming that the combined withholding and personal tax rate on dividends is 5 percent and the tax rate on interest receipts is 10 percent.[22] These results indicate METRs somewhat, but not significantly, higher than those with only the corporate profits tax presented in column (4). The METRs in this case, which will serve as the benchmark for the subsequent analysis of the other taxes in the system, range from -14.4 to 27.8 percent, reflecting a relatively moderate overall tax burden, coupled with quite large tax differentials across assets, distributed in the pattern described previously.

The effects on METRs of the other taxes are shown in Table A.3. The first column repeats column (6) of Table A.2, the corporate profits tax METRs under the low withholding and personal tax scenario. Column (2) shows the effects of indirect taxes in the form of customs duties and the property transfer tax applied to land and structures. These indirect taxes result in increases in all the METRs, with by far the largest effects occurring for those assets subject to customs duties, especially when such duties are relatively high (renovations, furniture and especially cars). In particular, the METRs on investment in all of the depreciable assets, which are subject to customs duties of at least 7.5 percent, increase significantly, with the smallest increase being 17 percentage points for machinery and equipment, and huge increases for furniture (41 percentage points) and cars (nearly 70 percentage points) where customs duties are especially high. Note that the effects of any indirect taxes on METRs are typically quite large, relative to the size of the tax, since the tax applies to the gross price of the asset, rather than to a measure of net income. Customs duties do not act to reduce the range of tax differentials, which in fact increases to 12.5-70.3 percent. The pattern of tax differentials across assets changes, however, as METRs are now particularly high on cars and trucks and buses (70.3 and 46.6 percent), much lower on structures, land, computers and mainframes (12.5-21.4 percent) and at intermediate levels for all of the other assets (25.7-35.3 percent).

The effects of the property tax are shown in column (3) of Table A.3. The property tax increases the METRs on land and structures by approximately three percentage points, roughly reflecting the cost of the annual wealth tax as a fraction of annual income. Since none of the other assets are subject to the property tax, their METRs are unchanged.

Finally, column (4) of Table A.3 reflects the effects of the imposition of a gross receipts tax at a rate of 8 percent, similar to that imposed on the hotel industry. The METR calculations indicate that the effects of the gross receipts tax is significant, resulting in increases in the METRs that range from 5-22 percent.

## METs by Asset for an IPC

The next set of results, presented in Table A.4, provides METRs for the case of a firm eligible for IPC status. As described above, the imputations to shareholders allowed under the new fiscal regime for such firms imply that the combination of the corporate tax plus imputations imposes a burden of only approximately 2 percent, with any additional tax burden attributable to withholding and/or personal level taxes. Note that the initial burden of the corporate tax plus

[22] Unfortunately, no data are available on the extent to which dividends and interest are in fact subject to tax, so that any attempts to model such taxes are inherently quite tentative.

imputations is not exactly 2 percent due both to mis-measurement of the tax base and the use of debt finance. However, in marked contrast to the situation under the regular income tax, both tax base mismeasurement and the use of debt finance do not have a significant effect on the METRs because the effects of any income mismeasurement and the advantage of interest deductions are almost fully eliminated by offsetting changes in imputation payments.

METR results analogous to those presented in Table A.3 for a firm subject to the regular tax system are presented in Table A.4 for a firm with IPC status. Column (1) provides METRs for the profits tax in the low withholding plus personal tax scenario (5 percent withholding on dividends and 10 percent personal tax on interest income). The METRs in this case range from 9.0-10.9 percent. As expected for an investment in an IPC, the primary tax burden arises from withholding and personal taxes, and is relatively modest under the low withholding and personal tax scenario. The average level of taxation is in a very rough sense similar to that under the regular tax system (where METRs vary from -14.4 percent to 27.8 percent in this case). However, an important difference is that METRs across assets exhibit relatively little variance for an IPC; this result obtains because the effective corporate level tax is around 2 percent for all assets. Thus, while the average levels of taxation under the two systems are roughly similar, the distortions of the allocation of investment across assets that characterize the regular tax system are virtually eliminated for an IPC.

The effects of indirect taxes in the form of customs duties and the property transfer tax are shown in column (2). These METRs vary from 13.1 to 71.4 percent, reflecting the wide range of customs duties that are applied to capital assets in Aruba. Thus, indirect taxes both increase the level of taxation and create large tax differentials across assets for an IPC firm. The range of METRs is quite similar to that for a firm subject to the regular tax system (12.5-70.3 percent), although the pattern is somewhat different. For an IPC, the tax system is biased against investment in furniture, cars, and trucks and buses, all of which face METRs in excess of 40 percent (with cars subject to the highest tax with a 71.3 percent METR), tends to favor investment in inventories, land, and structures, which face METRs below 20 percent, and applies an intermediate level of tax, between 20-40 percent, to investment in machinery and equipment, renovations, office equipment, computers, and mainframes.

Finally, columns (3) and (4 hotel occupancy) show the effects of the property tax and the hotel occupancy tax, which are broadly similar to those under the regular income tax. The property tax raises the METRs on investment in land and structures by roughly two percentage points, and the hotel occupancy tax raises METRs by another 5-17 percentage points.

## Calculating METRs for Several Potential Investments

The METRs for the five specific potential investments presented in this report (construction of a new hotel, expansion of an existing hotel, renovation of an existing hotel, expansion of the existing heavy oil refinery, and creation of a small-scale service business) are calculated as weighted averages of the METRs for the individual assets presented above. Ideally, these weights would be accurate estimates of the fractions of the capital stocks accounted for by each asset. Not surprisingly, it is difficult to obtain such estimates for potential investments in Aruba. Although no official data that could be used to construct such weights are available, we were able to obtain some estimated capital stock weights from data provided by some private sector accountants for the construction of a new hotel, and the expansion and renovation of an existing hotel, and standard industrial planning parameters for a refinery expansion from Valero. In addition, we simply constructed estimates of the capital stock weights for the creation of a small-scale service business. These weights, although not precise, provide an acceptable basis for estimating the METRs for individual investments. To the extent the weights may be suspect, it is a straightforward matter to take any different set of weights and, using the METRs for individual assets provided in Tables A.3 and A.4, construct new estimates for the METRs on potential investments.

The estimates for the capital stock weights for the five potential investments are presented in Table A.5. The construction of a new hotel and the hotel expansion are especially structures intensive, with the former requiring a significant land component while the latter is assumed to occur on existing land. All three of the hotel-related investments are also furniture intensive, and the asset category "renovations" naturally is important for a hotel renovation. The other assets play relatively minor or no roles in the three hotel-related investments. The key features of the refinery expansion are that it involves a great deal of machinery and equipment, with structures also playing a smaller but important role, and that all imported inputs, other than furniture, are exempt from customs duties. Finally, the key assets for a small service business are assumed to be office equipment, furniture and computers, and land and structures (in the form of rental of office space).

## Overview of the METR Methodology

### *General Discussion*

The concept of a marginal effective tax rate was created to analyze in a single measure how investment decisions are affected by the large number of provisions of the business and individual income tax systems, as well as by features of any property and wealth taxes, indirect transactions taxes including import duties, gross receipts taxes (including hotel occupancy taxes), retail sales taxes and the value-added tax (VAT), and special incentive regimes such as tax holidays, that affect the incentives to invest. METR analysis is based on the standard neoclassical model of investment in which the level of investment is assumed to be a function of the "cost of capital" faced by a firm – the minimum or "hurdle" rate of return that an investment must earn to be profitable – an assumption that has been confirmed by the most recent empirical evidence on this issue (Gordon and Hines, 2002). METR analysts, such as King and Fullerton (1984), Boadway, Bruce and Mintz (1984) and many others, have taken the basic neoclassical model and modified it to take into account the net effect of all the provisions of a tax system on the cost of capital to the firm. The primary goal of an METR analysis is thus to describe this net effect of a tax system on investment incentives in a straightforward and intuitively appealing form.

The calculation of a METR requires careful specification of the characteristics of an investment in a specific asset in a specific sector, including the time path of its returns, the rate of economic depreciation of the asset and the length of its life, how the asset is financed, the economic environment in which it occurs, including the inflation rate, interest rates, and returns to equity, and all of the features of the current or proposed tax system that affect both the after-tax returns and the after-tax costs attributable to the investment, including all tax depreciation allowances, investment credits and allowances, interest deductions, special exemptions, etc., allowed under the income tax as well as any other taxes that impinge on investment decisions. Given this information, the analysis calculates the effective tax rate on a marginal or breakeven investment under the assumptions of profit maximization by the firm, competitive markets, and perfect certainty (e.g., with respect to future returns and inflation rates).

Several additional assumptions underlying the METR approach should be noted. For example, METRs assume that firms are profitable, so that if the effective tax rate on an investment is negative (it is subsidized at the margin), the resulting losses can be used currently to offset other income. METR calculations are typically static; that is, they usually assume that the tax system in place at the time of investment remains unchanged for the life of the investment, and that inflation, when included in the analysis, also remain constant. Since the analysis typically assumes that assets depreciate at a constant rate but last forever, strictly speaking this implies that the analysis assumes the tax system and inflation rate remain fixed forever. In addition, the calculation of METRs is partial equilibrium in nature. Thus, some rate of return in the economy must be taken as fixed; in the context of a small open economy such as that of Aruba, it is natural to take as fixed an interest rate that is determined in international capital markets. The return to equity, inclusive of an equity premium, can also be treated as determined in international markets. An implication of these partial equilibrium assumptions is that METR analysis cannot be used to analyze the shifting of business taxes to consumers or workers that might occur with market adjustments in the context of a general equilibrium model of the economy. Instead, the analysis implicitly reflects the rather simplistic assumptions regarding tax incidence implied by the assumption of a fixed rate of return after corporate-level taxes – that gross returns increase by enough to offset all business level taxes and that personal level taxes on capital income are borne by the owners of those assets – and that taxes on labor are borne by labor and general consumption taxes are borne by consumers. Accordingly, to the extent that these incidence assumptions are incorrect, reported METRs levels and differentials may be somewhat misleading. METRs also typically do not take into account, or take into account in a fairly ad hoc way, issues of tax administration, compliance and evasion, as they describe the tax system as it would operate if it were effectively administered and enforced. Again, to the extent that certain types of taxes (e.g., taxes on capital assets rather than capital income) are more easily enforced than others or are plagued with less tax evasion, the reported METRs may be misleading with respect to the effects of the tax system as it actually affects investment decisions and tax revenues.[23]

Finally, as noted above, a METR is defined as the tax wedge between the gross of tax and net of tax returns earned by a marginal investment, expressed as a percentage of the gross return. (The "gross" and "net" terminology refers to returns before and after taxes; both types of returns are defined net of actual economic depreciation.) The net return can be measured at the company or "entity" level, in which case only entity level taxes (including withholding taxes) are considered. Such calculations are sometimes referred to as "open economy" METRs, since the taxation of saving at the level of the saver is ignored. Alternatively, the net return can be measured at the level of the "saver" or provider of funds; in this case, the calculation includes taxation at the individual level. Such calculations are sometimes referred to as "closed economy" METRs since the source of investment funds is assumed to be domestic savers. Since Aruba closely approximates a small open economy, the report will report METRs calculated at the firm level, including, in some cases, withholding taxes on repatriations of funds from subsidiaries in

23 Note also that since METRs are calculated for marginal investments, they are not a good indicator of the tax revenues that are raised from taxing capital income, which depend heavily on the taxation of inframarginal and other investments that earn above-normal returns.

Aruba to their foreign parents. However, since the taxation of domestically financed investment is also of concern, the analysis will also consider METRs that include both firm and individual level taxes.

## Issues Illuminated by METR Analysis

The primary applications of METR analysis are twofold. First, the results of an METR analysis show the net effect of all components of the tax system on the *level* of the taxation of capital income generated by marginal investments in the various types of assets defined by the tax code. For example, an METR can be calculated to measure the actual tax burden on a prospective investment in a particular type of asset attributable to the existing (or any proposed) tax system. Moreover, appropriately weighted averages of the METRs on investments on all of the types of assets defined by the tax code can be constructed to provide estimates of the METRs on specific investments. METRs thus show how the tax system distorts investment decisions (and, if individual level taxes are considered, saving decisions as well) and thereby introduces inefficiencies or "excess burdens" into the economy.[24]

Second, by considering a variety of investments that differ in asset composition, method of finance, investor or economic circumstances, METR analysis provides an indicator of the tax differentials that arise across different types of investments – that is, it shows how taxes affect the *composition* of investment. In particular, a METR analysis shows how the tax system results in a variety of distortions of investment decisions, thus creating additional efficiency losses, beyond those associated with simply taxing capital income at a uniform effective tax rate. The most commonly cited distortion is across types of assets, as differential taxation of different types of assets induces businesses to invest too heavily in tax-advantaged assets and too little in tax-disadvantaged assets. This of course translates into distortions across business sectors, as the tax system favors sectors with production processes that use tax-favored assets intensively and penalizes businesses that use relatively heavily taxed assets intensively.

In addition, METRs can identify a variety of other tax-induced distortions, including distortions of decisions regarding the method of finance (debt vs. equity, and new share issues vs. retained earnings) and the choice of organizational form (corporate vs. non-corporate). Finally, METR calculations can be used to demonstrate how tax rate differentials, as well as the level of capital income taxation, vary with the rate of inflation.

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24 It should be noted that "distortions" of investment decisions must be measured relative to some benchmark. In general, a tax system would not distort investment decisions only if the METR were zero on all types of investment; this would occur, for example, under an ideal consumption-based tax (Zodrow and McLure, 1991). In this case, METR differentials – and the associated distortions of investment decisions – would be measured relative to a benchmark tax rate of zero. However, under an income-based tax, the benchmark level of taxation of capital income is typically the statutory income tax rate. In this case, the distortion of saving/investment decisions implied by the taxation of capital income at the statutory rate is in a sense taken as given, and the distortions attributable to tax differentials are measured relative to the statutory income tax rate. In addition, note that this discussion assumes that efficiency requires a tax system that is neutral across assets. This need not be true. For example, tax differentials may be desirable to correct for negative production externalities (e.g., pollution) or to offset other inefficiencies in the economy (e.g., inefficiencies in the taxation of labor income or due to protective tariffs). These complications are ignored in the analysis, as they are best addressed with specific tax policies as needed (e.g., taxes on effluents or reform of the system of labor income taxation) rather than through the ordinary income tax system applied to capital income; for further discussion, see Gugl and Zodrow (2004). Finally, taxes on capital income are not distortionary if they are offset by the benefits of public services received. Since the taxes analyzed in this report are not likely to be related to the benefits of public services received, this factor is not considered explicitly in the analysis. However, it should be remembered that it is always desirable to replace general taxes on capital, such as the corporate profits tax or customs duties, with taxes that are explicitly related to government benefits received, such as user charges and fees.

## Details of the METR Calculation

The calculation of METRs is outlined in this annex (for further details, consult Boadway, Bruce and Mintz, 1984, or King and Fullerton, 1984). Consider an investment in an asset that costs $q$, has a marginal revenue product of $c$, and lasts forever but depreciates exponentially at a constant rate of economic depreciation $\delta$. Suppose further that the corporate income tax rate is $u$, the net indirect tax rate on the purchase of the asset, due to import taxes and property transfer taxes (this category would typically also include any non-creditable VATs, sales taxes, excise taxes, and any other transaction taxes applied to purchases of capital equipment), is $t$ (which is included in the tax basis of the asset), a tax on the gross receipts produced by the asset, deductible against the corporate income tax, is assessed at rate $t_g$, and a property or wealth tax, not deductible against the corporate income tax, is assessed on the market value of the asset, net of any indirect taxes, at rate $w$. Let $z$ be the present value of the depreciation deductions allowed under the income tax, per dollar of investment, over the life of the asset. For example, if the tax code allows exponential (declining balance) deductions at rate $\alpha$, with no adjustment for inflation,

$$z = \int_0^\infty \alpha q e^{-\alpha t} e^{-(r^f + \pi)t} dt = \frac{\alpha q}{\alpha + r^f + \pi},$$

where $r^f$ is the firm's real discount rate and $r^f + \pi$ is the firm's nominal discount rate where $\pi$ is the expected steady state rate of inflation. In addition, an initial investment allowance of $n$ is granted (with no adjustment of basis). To calculate the firm's discount rate $r^f$, assume that the debt-asset ratio is fixed at $\beta$, the nominal interest rate is $i$ and the nominal return required by equity holders (which reflects dividends and capital gains) is $\rho$, in which case

$$r^f = \beta(1-u)i + (1-\beta)\rho,$$

reflecting the deductibility of interest payments coupled with the lack of deductibility of payments to shareholders. The calculation of a marginal effective tax rate (METR) assumes that a marginal investment in an asset just breaks even, that is, that the net benefits generated by the investment, taking into account all tax factors, just equals the after-tax net cost of the investment. For a depreciable asset, assuming that property or wealth taxes are not deductible against the corporate income tax, this requires

$$(1-un)(1+t)q = (1-u)(1-t_g)\int_0^\infty ce^{-\delta t}e^{\pi t}e^{-(r_f+\pi)t}dt + u(1+t)qz - w\int_0^\infty qe^{-\delta t}e^{\pi t}e^{-(r_f+\pi)t}dt$$

$$(1-un)(1+t) = \frac{(1-u)(1-t_g)(c/q)}{\delta + r_f} + u(1+t)z - \frac{w}{\delta + r_f}$$

$$c/q = \frac{(1-un)(1+t)(\delta + r_f)}{(1-u)(1-t_g)} - \frac{u(1+t)z(\delta + r_f)}{(1-u)(1-t_g)} + \frac{w}{(1-u)(1-t_g)}$$

The gross return to the asset, net of depreciation, is thus

$$r_g = c/q - \delta = \frac{(1+t)(\delta + r_f)}{(1-u)(1-t_g)}\left[1-u(n+z)\right] + \frac{w}{(1-u)(1-t_g)} - \delta .$$

For land, the gross return is obtained by setting the depreciation rate in this expression equal to zero. For inventories, the gross return is obtained by setting the depreciation rate in this expression equal to zero and, in the case of FIFO inventory accounting, adding a term to $r^f$ equal to the product of the corporate tax rate and the inflation rate (Boadway, Bruce and Mintz, 1982). Finally, letting $r_n$ denote the real return to investment received by the saver, net of the combined withholding and any personal income tax burden on interest, $t_i$, and net of the combined withholding and any personal income tax burden on dividends, $t_d$,

$$r_n = \beta(1-u)i + (1-\beta)\rho - \pi,$$

the marginal effective tax rate on the investment is

$$METR = \frac{r_g - r_n}{r_g} \ .$$

Note that in the case of a foreign investor, this effective tax rate does not take into account any exchange rate effects or the effects of any foreign tax credits.

**TABLE A.1. ASSET TYPES AND TAX TREATMENT**

| Asset | Import Tax | Acc. Depr. | Initial Allow-1 | Initial Allow-2 | Tax Depr | Salvage Value | Property Tax | Prop Trans Tax | Econ Depr |
|---|---|---|---|---|---|---|---|---|---|
| Inventories | 0.075 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 |
| Land | 0 | 0.333 | 0 | 0 | 0 | 0 | 0.002 | 0.03 | 0.00 |
| Structures | 0 | 0.333 | 0.12 | 0.12 | 0.025 | 0.1 | 0.002 | 0.03 | 0.03 |
| Machines & Equipment | 0.075 | 0.333 | 0.08 | 0.08 | 0.1 | 0.1 | 0 | 0 | 0.15 |
| Renovations | 0.15 | 0.333 | 0.08 | 0.08 | 0.1 | 0 | 0 | 0 | 0.12 |
| Furniture | 0.22 | 0.333 | 0.08 | 0.08 | 0.2 | 0.1 | 0 | 0 | 0.12 |
| Office Equipment | 0.075 | 0.333 | 0.08 | 0.08 | 0.2 | 0.1 | 0 | 0 | 0.30 |
| Computers | 0.075 | 0.333 | 0.08 | 0.08 | 0.333 | 0.1 | 0 | 0 | 0.30 |
| Computer Mainframes | 0.075 | 0.333 | 0.08 | 0.08 | 0.125 | 0 | 0 | 0 | 0.20 |
| Cars | 0.4 | 0.333 | 0.08 | 0.08 | 0.333 | 0.15 | 0 | 0 | 0.33 |
| Trucks and Buses | 0.12 | 0.333 | 0.08 | 0.08 | 0.1 | 0.15 | 0 | 0 | 0.25 |

**TABLE A.2. MARGINAL EFFECTIVE TAX RATES BY TYPE OF ASSET, PROFITS TAX + WH TAXES**

| Asset | (1)<br>C*<br>All equity<br>Inflation=0 | (2)<br>C*<br>All Equity<br>Inflation=3% | (3)<br>C<br>All Equity<br>Inflation=3% | (4)<br>C<br>50% Debt<br>Inflation=3% | (5)<br>C+WH1<br>50% Debt<br>Inflation=3% | (6)<br>C+WH2<br>50% Debt<br>Inflation=3% |
|---|---|---|---|---|---|---|
| Inventories | 35.0% | 35.0% | 35.0% | 20.1% | 52.3% | 27.8% |
| Land | 26.5% | 26.5% | 26.5% | 9.6% | 46.1% | 18.4% |
| Structures | 26.6% | 27.7% | 18.2% | -1.0% | 39.8% | 8.8% |
| Machinery and Equipment | 27.7% | 30.1% | 18.4% | -0.9% | 39.8% | 8.8% |
| Renovations | 20.5% | 23.5% | 11.2% | -14.3% | 31.8% | -3.2% |
| Furniture | 18.7% | 20.4% | 7.1% | -17.0% | 30.2% | -5.7% |
| Office Equipment | 29.5% | 31.8% | 12.1% | -11.5% | 33.4% | -0.8% |
| Computers | 24.4% | 26.0% | 2.2% | -26.7% | 24.4% | -14.4% |
| Computer Mainframes | 22.4% | 25.9% | 9.3% | -20.0% | 28.4% | -8.4% |
| Cars | 31.2% | 32.5% | 11.3% | -9.1% | 34.9% | 1.4% |
| Trucks and Buses | 37.5% | 39.8% | 27.2% | 13.3% | 48.2% | 21.7% |

Notation:

C*=corporate income tax without investment allowances; C=corporate income tax with investment allowances; WH1=high withholding and personal taxes; WH2=low personal and withholding taxes

**TABLE A.3. MARGINAL EFFECTIVE TAX RATES BY TYPE OF ASSET, ALL TAXES**

| Asset | (1) C+WH2 50% Debt Inflation=3% | (2) C+WH2+I 50% Debt Inflation=3% | (3) C+WH2+I+P 50% Debt Inflation=3% | (4) C+WH2+I+P+G 50% Debt Inflation=3% |
|---|---|---|---|---|
| Inventories | 27.8% | 32.8% | 32.8% | 38.2% |
| Land | 18.4% | 20.8% | 23.5% | 29.6% |
| Structures | 8.8% | 12.5% | 15.8% | 24.8% |
| Machinery and Equipment | 8.8% | 25.7% | 25.7% | 39.6% |
| Renovations | -3.2% | 27.5% | 27.5% | 39.5% |
| Furniture | -5.7% | 35.3% | 35.3% | 45.4% |
| Office Equipment | -0.8% | 28.5% | 28.5% | 47.5% |
| Computers | -14.4% | 21.4% | 21.4% | 43.4% |
| Computer Mainframes | -8.4% | 17.6% | 17.6% | 36.5% |
| Cars | 1.4% | 70.3% | 70.3% | 75.5% |
| Trucks and Buses | 21.7% | 46.6% | 46.6% | 57.6% |

Notation:
C*=corporate income tax without investment allowances; C=corporate income tax with investment allowances;
I=indirect taxes; P=property taxes; WH1=high withholding and personal taxes; WH2=low personal and withholding taxes;
G=gross receipts tax

**TABLE A.4. MARGINAL EFFECTIVE TAX RATES BY TYPE OF ASSET, IPC, ALL TAXES**

| Asset | (1) C+WH2 50% Debt Inflation=3% | (2) C+WH2+I 50% Debt Inflation=3% | (3) C+WH2+I+P 50% Debt Inflation=3% | (4) C+WH2+I+P+G 50% Debt Inflation=3% |
|---|---|---|---|---|
| Inventories | 10.5% | 16.8% | 16.8% | 23.4% |
| Land | 10.5% | 13.1% | 15.3% | 22.1% |
| Structures | 10.1% | 13.7% | 15.9% | 24.8% |
| Machinery and Equipment | 10.1% | 26.5% | 26.5% | 40.2% |
| Renovations | 9.6% | 34.9% | 34.9% | 45.2% |
| Furniture | 9.2% | 42.3% | 42.3% | 50.9% |
| Office Equipment | 9.6% | 34.3% | 34.3% | 51.0% |
| Computers | 9.0% | 33.9% | 33.9% | 50.7% |
| Computer Mainframes | 9.5% | 29.0% | 29.0% | 44.1% |
| Cars | 9.4% | 71.4% | 71.4% | 76.3% |
| Trucks and Buses | 10.9% | 41.2% | 41.2% | 53.9% |

Notation:

C*=corporate income tax without investment allowances; C=corporate income tax with investment allowances;
I=indirect taxes; P=property taxes; WH1=high withholding and personal taxes; WH2=low personal and withholding taxes;
G=gross receipts tax

**TABLE A.5. CAPITAL STOCK WEIGHTS FOR POTENTIAL INVESTMENTS**

| Investment | New Hotel | Hotel Expansion | Hotel Renovation | Refinery Expansion | Small Service Business |
|---|---|---|---|---|---|
| Inventories | 2% | 0% | 0% | 8% | 5% |
| Land | 20% | 0% | 0% | 0% | 10% |
| Structures | 50% | 65% | 0% | 26% | 35% |
| Machinery and Equipment | 4% | 5% | 10% | 65% | 5% |
| Renovations | 0% | 0% | 20% | 0% | 0% |
| Furniture | 15% | 20% | 60% | 0.5% | 10% |
| Office Equipment | 2% | 5% | 10% | 0.5% | 15% |
| Computers | 5% | 5% | 0% | 0% | 15% |
| Computer Mainframes | 0% | 0% | 0% | 0% | 0% |
| Cars | 2% | 0% | 0% | 0% | 5% |
| Trucks and Buses | 0% | 0% | 0% | 0% | 0% |

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