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Nepal: Selected Issues

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NEPAL

Selected Issues

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Approved by the Asia and Pacific Department

September 26, 2011

Contents Page

I. Inflation Dynamics in Nepal 2
A. Introduction 2
B. Stylized Analysis 3
C. Econometric Analysis 4
D. Policy Implications 7
References 8

II. Nepal's Tax Regime 9
A. Introduction 9
B. The Characteristics of Nepal's Tax Regime 9
C. Tax Policy Issues in Nepal 13
D. Tax Policy Reform Options 21
References 24

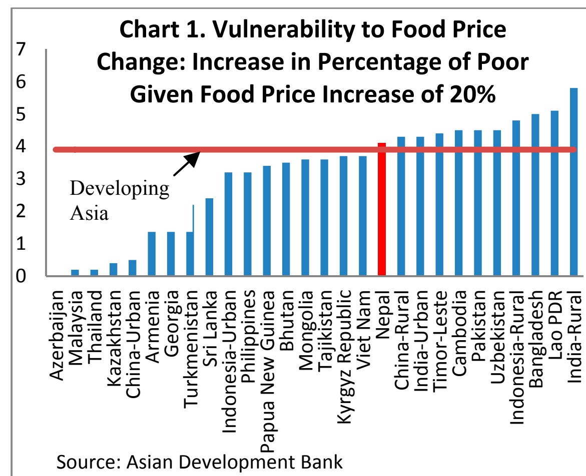
Tables
1. Main Characteristics of Nepal's Tax System 10
2. Tax Revenue Structure 16
3. Tax Revenue Structural Changes–Annual Averages 16
4. Tax Revenue Collections 17
5. Productivity of Tax Revenues 18
6. Tax Rates 19
7. Trade-offs of Different Tax Incentives 20
8. Options to Increase Tax Revenues 23

Appendix
1. Regional Comparison of Tax Incentives 25

I. Inflation Dynamics in Nepal

A. Introduction

1. **Nepal's inflation rate has stood at around two-digit levels for three consecutive years, averaging 10½ percent in the last three years and reaching about 10 percent by mid-2011.** High inflation has had important bearing on social and economic development in Nepal. According to a recent report of the Asian Development Bank, the vulnerability of Nepal's poor to rising food prices is above the average of developing Asia. Specifically, a 20 percent food price inflation would cause the poverty ratio to rise by over 4 percentage points, increasing the poor population by more than 1 million. International experience also indicates that food inflation is in fact more persistent than nonfood inflation, and shocks to food inflation in many low income countries are propagated strongly into nonfood inflation.[1] As discussed below, Nepal's food price inflation has been much higher than nonfood inflation. Moreover, Nepal maintains an exchange rate peg with the Indian rupee, and therefore high inflation has caused Nepal's exchange rate to appreciate in real terms, leading to widening trade deficits and erosion of international competitiveness. In the past three years, the real effective exchange rate has appreciated by 10½ percent, and trade deficit widened to 24½ percent of GDP from 18 percent.

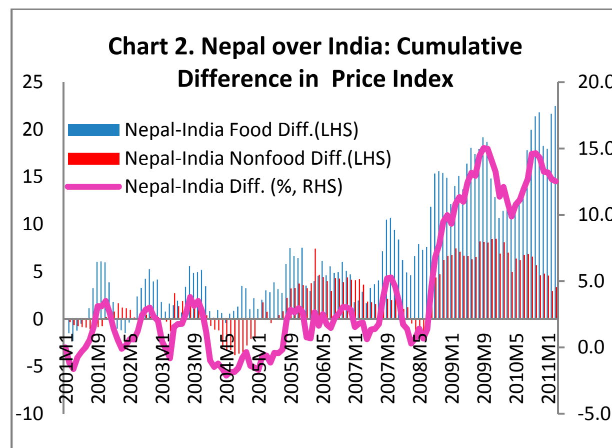


2. **This note aims to study the source of Nepal's inflation and corresponding policy implications.** It is organized as follows: section II includes stylized analysis of Nepal's inflation; section III uses a VAR model to estimate the source of Nepal's price movements; and section IV lays out policy implications.

[1] "Reconsidering the role of food prices in inflation", IMF working paper 11/71

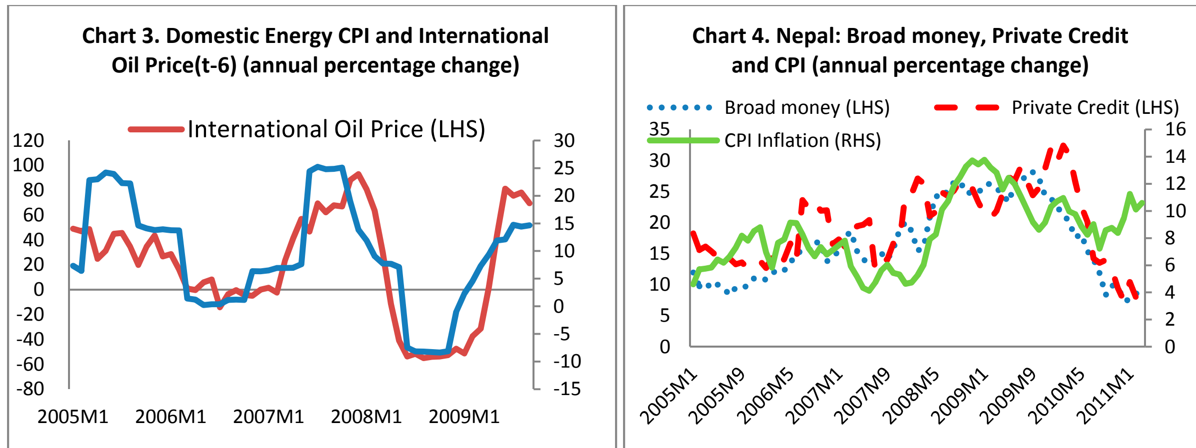
B. Stylized Analysis

3. **Although Nepal maintains an open border with India and pegs its currency to the Indian rupee, Nepal's inflation rate does not go in lockstep with that of India.** Intuitively, Nepal's inflation should move closely with that of India. This was generally true up until 2007/08, but since then Nepal's inflation—food and nonfood—has been consistently higher. Chart 2 shows the cumulative difference of Nepal's price indices from those of India, which rose dramatically from 2007/08. The margin of Nepal's food price over that of India in cumulative terms has more than quadrupled that of nonfood by early 2011.



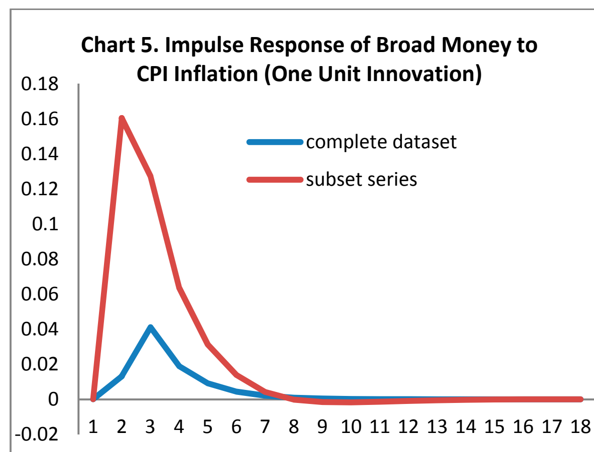
4. **Rising inflation in Nepal has been mainly driven by food price inflation.** In the past three years, Nepal's food inflation averaged 15½ percent, compared to 6½ percent of the nonfood. Food price increases have cumulatively contributed about ¾ of overall CPI inflation, while nonfood contributed the remaining ¼. Meanwhile, food price inflation has also been more volatile than nonfood.

5. **Nepal's price level has also comoved with international commodity prices and certain domestic policy factors.** Despite price control over fuel products, Nepal's CPI energy sub-index parallels movements in international oil prices, though the magnitude of the spillover is relatively low, reflecting a lagged and partial adjustment of domestic fuel prices. Moreover, there is a correlation among movements in broad money, private credit and overall CPI inflation.



C. Econometric Analysis

6. **A VAR model is estimated to identify factors driving Nepal's inflation.** The analysis considers four types of factors: external spillovers from India, international oil prices, the nominal effective exchange rate, and domestic monetary factors. The study further distinguishes between food and nonfood inflation to identify the respective driving forces, and estimates separately a full dataset ranging from 2000 till early 2011 and a subset ranging from 2007 till early 2011 to capture the changing pattern of inflation since 2007.



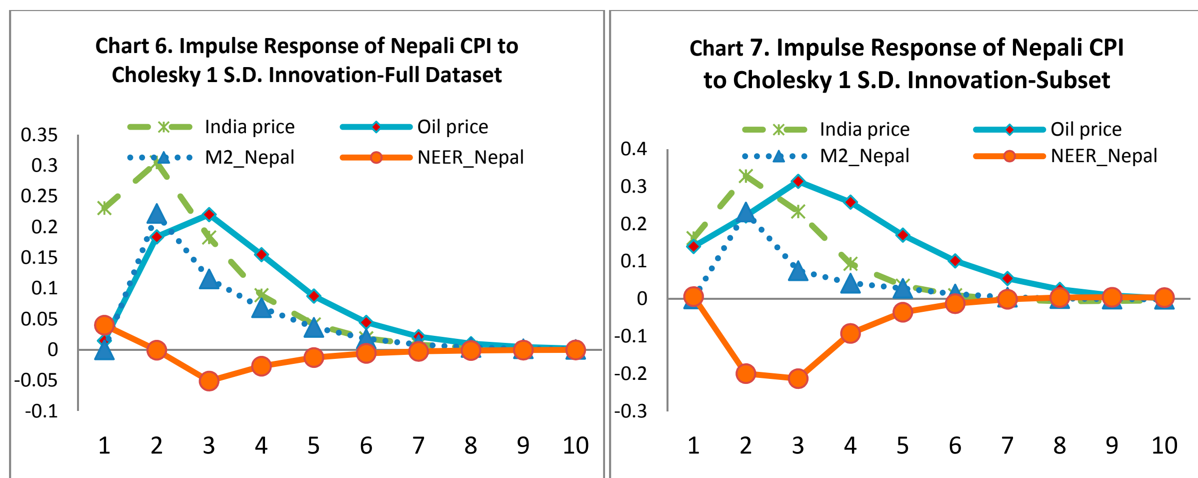
7. **The results indicate that the main driving forces behind Nepal's inflation—food and nonfood—are India's inflation and movements of international oil prices.** Monetary factors matter for nonfood price inflation significantly and, to a lesser extent, for food price inflation, but the monetary effects fade out quickly. An appreciating nominal effective exchange rate would have a negative and lagged impact on inflation only in the study of the subset series. Moreover, responsiveness to international oil prices and the exchange rate has increased in recent years. It is also noteworthy that there is no evidence monetary policy tools have been actively used to manage inflation. Rather, there seems to be somewhat of a pro-cyclicality in monetary conditions (chart 5). The detailed results are summarized as follows:

CPI Inflation

- Both India's inflation and international oil prices have strong spillovers to Nepal. India's inflation has a quick spillover effect, while the impact of international oil prices is slower but more persistent. It is noteworthy that oil prices have a stronger effect in the study of the subset series, indicating increased response of Nepal's inflation to movements in international oil prices in recent years. Variance decomposition analysis indicates that over time India's inflation and international oil price movements together would account for more than 1/3 of the variability in Nepal's inflation.

- The nominal effective exchange rate has a significant negative effect on inflation in the study of the subset data only. This result indicates increased responsiveness to movements of nominal effective exchange rate in recent years, which may reflect rising imports as a share of GDP.

- Broad money also has a lagged and temporary effect on inflation, but its magnitude falls short of the other factors such as India's inflation and international oil prices.

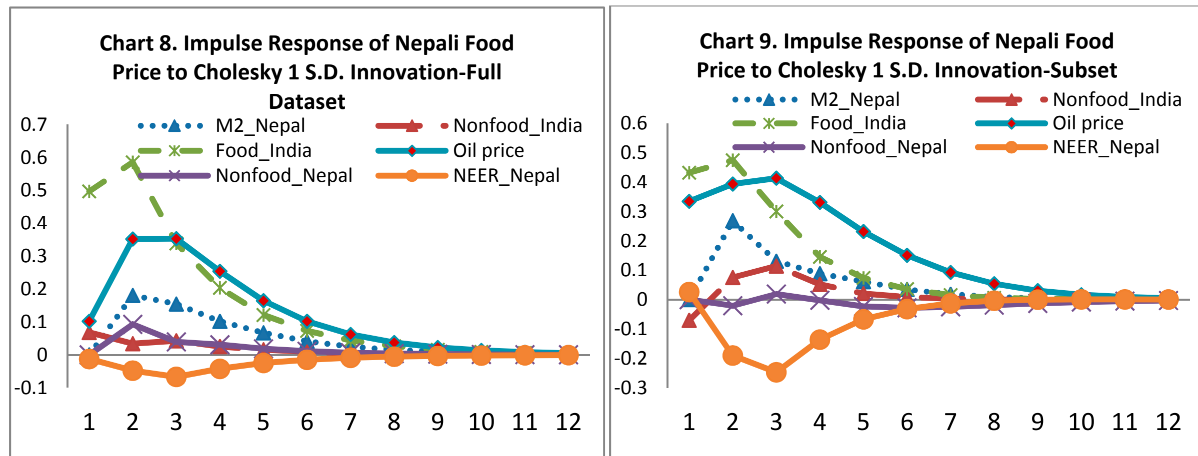


Food inflation

The impulse responses of Nepal's food inflation are similar to those of the overall CPI inflation, albeit stronger.

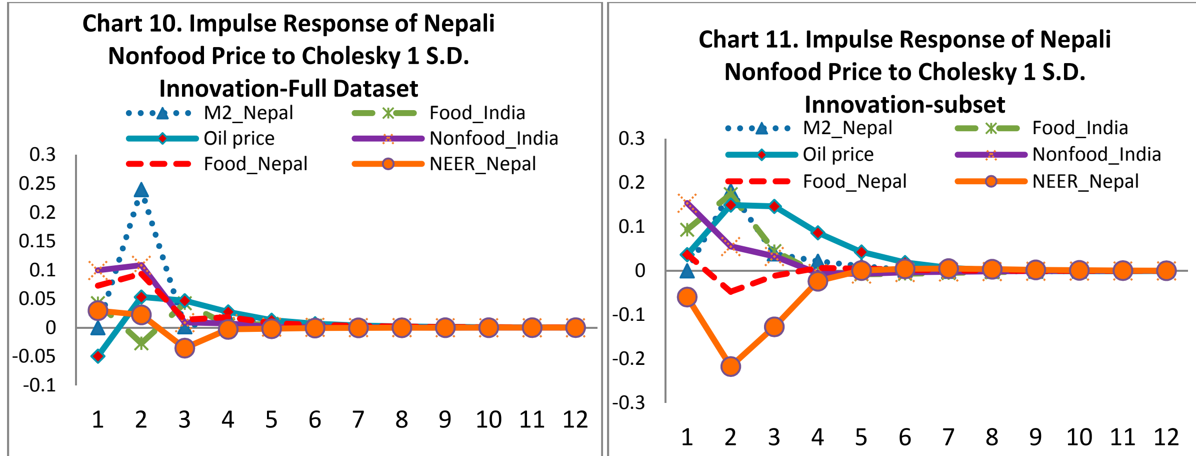
- Food price inflation responds significantly and quickly to spillovers from India's food inflation and international oil price movements. The oil price has a more persistent impact than India's food inflation, and the impact intensified in recent years as shown by the study on the subset data series. The response of food price to oil price may be due to the correlation between oil price and those of chemicals and fertilizers used in agricultural production, transportation cost of agricultural products and use of energy in irrigation.

- The nominal effective exchange rate has a negative effect on food inflation with a lag of about three months in the study of the subset series only.
- Monetary conditions also have a significant impact on food price inflation in the study of the subset series, though it fades out quickly. The increased responsiveness to monetary conditions calls for attention of policy makers.



Nonfood inflation

- In the studies on both the full dataset and the subset series, monetary conditions have a strong impact on nonfood price inflation, and the largest impact in the study of the full dataset. But the monetary effects remain short.
- Nonmonetary factors play an increasing role in recent years as reflected in the study of the subset series. Namely, Nepal's nonfood price inflation responds to Indian food and nonfood inflation as well as international oil prices to a larger extent since 2007.
- Similar to the above studies, the nominal effective exchange rate has a negative effect on nonfood price inflation, but in the study of subset series only.



D. Policy Implications

8. **In light of the above findings, management of inflation in Nepal will continue to be challenging.** An important development is the divergence of Nepal's inflation from that of India and increasing responsiveness to international oil prices and the nominal effective exchange rate in recent years. Though India's inflation continues to have a strong spillover to Nepal, other factors may have become increasingly important as consumption becomes more diversified alongside rising per capital income and increasing economic openness.

9. **Overall, the results of this study indicate a role for more active policy actions to manage inflation:**

- Nepal faces upside inflation risks given the still high food price inflation in India. If risks were to materialize, actions should be taken to contain second-round effects and inflation expectations.

- Since food price inflation has been higher and more volatile than nonfood price inflation, there is merit to pay attention to both headline inflation and core inflation.

- The changing pattern of inflation may reflect structural changes in Nepal's economy including, for example, rising imports as a share of GDP, and policy makers should be alert to these changes as they may cause inflation to be more volatile and persistent.

- Despite strong spillover from outside, domestic monetary conditions matter for inflation, but monetary policy tools have not been actively used to curb inflationary pressures. In this context, more active conduct of monetary policy in light of the existing high inflation should be considered.

References

Asian Development Bank, 2011. "Global Food Price Inflation and Developing Asia".

Bernanke, Ben, Boivin Jean and Eliasz Piotr, 2005. "Measuring the effects of monetary policy: a factor-augmented vector autoregressive approach" The Quarterly Journal of Economics

Bhattacharya, Rudrani, Ila Patnaik and Ajay Shah, 2011. "Monetary policy transmission in an emerging market setting" IMF working paper 11/5

Patra, Michael Debabrata and Partha Ray, 2010. "Inflation expectations and monetary policy in India: an empirical exploration" IMF working paper 10/84

Rudebusch, Glenn, 1998. "Do Measures of Monetary Policy in a VAR Make Sense?" International Economic Review, XXXIX (1998), 907–931.

Stock, James and Mark Watson, 1999. "Forecasting Inflation," Journal of Monetary Economics, XLIV (1999), 293–335.

Stock, James and Mark Watson, 2001. "Vector Autoregressions" Journal of Economic Perspective, Vol 15

Walsh, James, 2011. "Reconsidering the role of food prices in inflation" IMF working paper 11/71

II. NEPAL'S TAX REGIME

A. Introduction

1. **This note analyzes the tax policy system in Nepal and provides a menu of policy options to address weaknesses.** The last review of the Nepalese tax system was done in 2003, under a technical assistance (TA) mission by the IMF's Fiscal Affairs Department (FAD). This paper reports on the progress and other policy changes that occurred in the meanwhile. Two criteria are used for evaluating the regime: soundness of public finances from a macro-stability point of view, and effectiveness in supporting growth. The analysis also relies on cross-country comparisons and theoretical arguments.

2. **Improving the current system can be achieved mainly through reforming tax incentives and increasing the prevalence of domestic-source taxes.** The two main weaknesses are a high reliance on import-related revenues and a relatively low productivity of revenue collections. Furthermore, widespread tax incentives erode the tax base and weaken public finances, and the attempt to address pro-growth objectives through these incentives is ineffective. These weaknesses will create revenue pressures over the medium-term. The two most effective measures to address these weaknesses are eliminating some VAT exemptions and reforming corporate tax incentives. Implementing these measures would yield estimated revenue gains of over 2 percent of GDP by 2015.

B. The Characteristics of Nepal's Tax Regime

3. **The main tax categories in Nepal are income taxes, VAT, excises and custom duties.** Table 1 describes the tax regime in more detail, listing for each major tax the base, rate, and any exemptions or deductions.

- **The corporate income tax and remuneration tax are the main direct taxes.** The corporate income tax is generally flat, with various rebates and exemptions offered. The remuneration tax is progressive, with three rates between 15 and 35 percent. Beginning FY 2009/10 a small part of the remuneration tax, labeled social security tax, goes towards a social security fund. There is a fixed presumptive tax in place for the smallest firms. There are also taxes on investment profits and interest.

- **The main indirect taxes are VAT and excises.** The VAT was introduced in 1997 at a rate of 10 percent. The current rate is at 13 percent, with various exemptions and lower rates for certain goods and services. Ad-valorem and specific rates excises are in place for various goods (alcohol, vehicles etc.)

Table 1. Main Characteristics of Nepal's Tax System

		Tax Base	Tax Rates	Exemptions and Deductions
Direct taxes				
Payable by corporations and other enterprises	Corporate Income Tax (CIT)	private and public companies, government corporations, personal or sole-trading firms, other institutions	main rate: 25%	Social, religious, educational and charitable institutions, amateur sporting associations, political parties and local government institutions are exempt. Agriculture and rural cooperation activities are also exempt.
			personal and sole-trading firms taxes based on PIT rate schedule	Special industries (under Industrial Enterprise Act (1992), except for those producing tobacco or alcohol), cooperatives and infrastructure industries are taxed at 20%. For companies established in remote areas, tax rebates of between 25-50 percent apply.
			banks and financial institutions, producers of petroleum or high alcoholic goods taxed at 30%	Export income of companies is taxed at 20% and export income of personal and sole-trading firms is taxed at 15%.
				Companies in Special Economic Zones (such as those established by foreign investors, hydropower production, distribution and transmission, infrastructure and construction, IT etc.) benefit from various rebates. Also, in FY 2010/11 various incentives were introduced to encourage companies to enlist in the stock market or mergers.
	Presumptive Income Tax	companies or firms with turnover below 2 mill Rs or income below 200,000 Rs	fixed amount at 3,500 Rs in metropolitan and sub-metropolitan areas, 2,000 Rs in municipalities and 1,250 Rs in all other areas	None
Payable by individuals	Remuneration tax	resident employees of any entity or trading firm	Income up to Rs 160,000 is exempt. Income between Rs 160,000 and Rs 260,000 is taxed at 15%, between Rs 260,001 and Rs 2,500,000 at 25% and income above Rs 2,500,001 at 35%.	Deductions offered for retirement contributions, pension income, insurance premia, medical expenses, disabled persons, women. Allowances offered for people in remote areas and those working in the foreign service.
				The first 1% collected goes towards the Social Security Fund (beginning in FY 2009/10).
Other direct taxes	Tax on investment income	income from lease, rent, interest, capital gain, dividends or other income	5-15%	None
	Windfall Gain Tax	gains from promotional activities, lotteries, gifts, prizes, tips	25%	None
	Vehicle tax	yearly tax on ownership of vehicles	fixed fee of between Rs 750 and 1500, depending on the type of vehicle	None

(continued on next page)

Table 1. Main Characteristics of Nepal's Tax System (Continued)

Indirect taxes				
Taxes on goods and services	VAT		13%	Exports are zero-rated. The following goods are exempt: basic agricultural and animal products, agricultural inputs (seeds, fertilizers etc.), basic need goods and services (such as water, fuel wood, coal, kerosene and salt), education (books, newspapers), sports, culture (painting, carving, handicrafts), healthcare, public transportation (including air transport), personal or professional services (artists, writers, designers, translators), gold, silver, raw wool, woolen yarn, cotton, electricity, purchase and renting of land and building (except for by hotels etc.).
	Excises	duties on production, distribution and import of certain products	specific rates (molasses, nicotinic items, alcoholic drinks, bricks etc.) or ad-valorem rates (5-10% on common goods, 30-50% on vehicles)	ambulances, electric vehicles, local production of marbles, personal accessories imported free of custom duties
Taxes on international trade	Import Custom Duties	transaction value of imported goods, including freight, insurance and other such costs	6 slabs between 5% and 80%	Full or partial exemption for imports on projects operated under foreign loan or grant. Exemptions for goods imported by the government, Ministry of Defense or the Army. Crude petroleum oil, unprocessed mineral products, ores, fertilizer, certain health supplies, certain wood, wool and animal hairs are exempt. Exemptions for imports by companies in the Special Economic Zones. 1 % duty is collected on aircraft, irrigation machinery, mustard and rape seeds, pashmina yarn, etc. Partial exemptions for fibers for carpet industry, machinery for mill industry, medicines, air conditioner, cotton yarn and fabrics, gold, silver, ink and printing industry, certain imports for transport and tourism industries.
	Export Duties		70%, 200%	Applied mainly to wood products. Modicum fees on certain agricultural products, minerals, granite, sand, pebble exports imposed for recording purposes only. Sales of goods to companies in the Special Economic Zones are treated as exports. Export bans are in place on sand and gravel (since March 2010).
Other taxes	Health service tax	health services provided by institutions that are not government sponsored or community based	5%	None.
	Education service tax	education services provided by private institutions	1%	None.
	Property taxes	administered by local governments		

Sources: Internal Revenue Department, Department of Customs, Ministry of Finance.
Includes only main taxes, rates, exemptions and deductions.

- **Custom duties are also a major source of revenue, despite the gradual tariff liberalization in recent years.** There are six import duty slabs between 5 and 80 percent. Again, various full or partial exemptions apply, as well as lower duties for South Asian Association for Regional Cooperation (SAARC) countries. There are also export duties, mainly on wood products, with modicum fees on other products imposed for recording purposes only.

- **Lastly, there are several other taxes such as vehicle tax, education service tax, and house and land registration fees.**

4. **Nepal is competing with neighboring countries to attract investment and maintain low-cost exports.** In this respect, various incentives are embedded in the tax regime:

- **Corporate tax incentives are a main instrument to attract investment, as well as to promote growth objectives.** Most of the corporate tax incentives are tax rebates and are conditioned on generating employment or on location. Tax rebates seem to be offered extensively.
- [1,2] Agricultural and rural cooperatives are exempt of CIT, and "special industries"[3], cooperatives, infrastructure industries, including electricity sector, and export income benefit from tax credits. Many of these tax rebates apply indefinitely. Tax holidays are less prevalent and they apply for between 5 and 10 years. Investment allowances and accelerated depreciations seem to be rare in Nepal. Further, companies in Special Economic Zones benefit from deductions in CIT as well as in custom duties.

- **Numerous exemptions apply on VAT and custom duties, aimed to achieve social policy objectives or to support certain industries and exporters.** Exports are zero-rated, as is customary. However, many other incentives are awarded as VAT exemptions. For example, in addition to agricultural goods, agricultural inputs are also VAT exempt. Other goods exempt of VAT are certain fuels, gold, silver, wool, and electricity. Full or partial exemptions apply on custom duties for imports by projects operated under foreign financing or imports by the government, army etc. In addition, a multitude of other goods are exempt of custom import duties (petroleum, minerals and

[1] Very few of these (i.e. some incentives for exporters) are recorded as tax expenditures.

[2] Details on provisions for loss carried forward or backward are not available.

[3] Special Industries are defined under the Industrial Enterprise Act (1992).

ores, fertilizers, wood, wood, irrigation, gold, silver, printing industry, even tourism and transport industries).

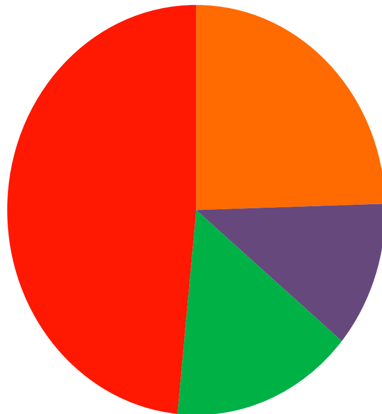
5. **The main tax policy objectives in Nepal are to promote investment, industrialization and exports.** Recent tax policy initiatives have continued to focus on providing incentives for investment and exports, and also extending the revenue base through administrative efforts. The FY 2010/11 budget introduced new incentives applying to infrastructure investment, exports (conditional on using local raw materials), IT sector activities located in the technology parks, or certain companies listed on the stock market. The electricity sector also benefits from tax holidays and credits; in addition, manufacturing firms are allowed faster depreciation of capital assets used to produce energy for their own production. The budget also introduced measures to extend the revenue base by requiring registration from several new sectors, involving mainly services. At the same time however, registration has been incentivized through the offering of tax amnesties.

C. Tax Policy Issues in Nepal

Issue #1: High Reliance on Import-based Revenues, Low Income Tax Revenues

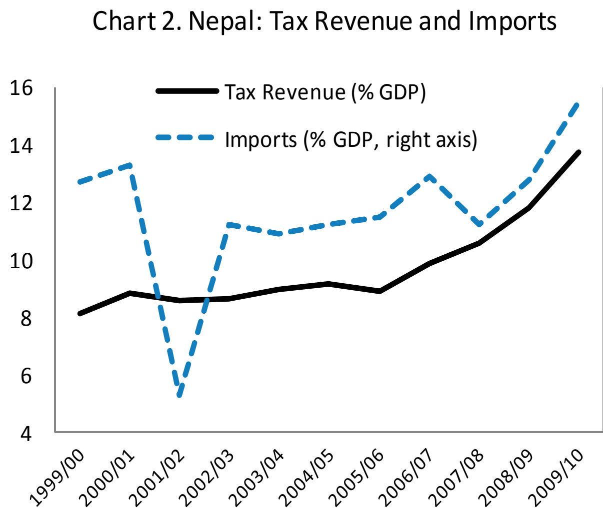
6. **The revenue structure is disproportionally oriented towards import-based revenues.** Import-related indirect tax revenues make up close to 50 percent of Nepal’s tax revenues. Non-import related indirect revenues account for over 20 percent of revenues, leaving direct taxes with only around 20 percent weight. Compared both with neighboring countries and with LICs, Nepal’s revenue structure is disproportionately tilted towards import-based revenues (Table 2). To be in line with the region, income tax revenues would have to be closer to 40 percent of tax revenues rather than 20 percent now, while trade revenues could decline from close to 30 percent of revenues now to 10-15 percent of revenues.

Chart 1. Nepal: Revenue Structure



7. **This tax structure cannot generate sustainable strong revenue growth in Nepal.** Tax revenues have increased by an average of one percentage point of GDP annually over the past 5 years. Strong import growth is the main factor behind this increase in tax revenues (Chart 2). Indeed, over half of the recent revenue gains come from import-

related revenues and revenue trends closely match the fast growth in imports over this period (Table 3). The charts below (3a-3c) illustrate that the growth in import-related revenues is significantly flattened when expressed relative to imports rather than GDP. Similarly, revenue elasticity calculations also show elasticities with respect to imports being much lower than those with respect to output, indicating that the high buoyancy of revenues is partly explained by the fast increase in imports relative to output. Given continued trade liberalization as well as an expected easing of import growth, import-based revenues are unlikely to continue providing strong revenue growth in Nepal.



8. **Despite significant progress in recent years, Nepal's revenue to GDP ratio remains relatively low.** Nepal's tax revenue to GDP ratio is slightly lower than the average revenue ratios for LICs (Table 4). In a regional perspective, Nepal's tax ratio is lower than China, India and other Asian emerging markets (EMs) by 2-3 percentage points, and similar to Sri Lanka's. Only Bhutan and Bangladesh have lower tax revenues to GDP than Nepal. In addition to strong import growth, administrative gains and tax policy measures have also helped Nepal's revenue growth. For example, there is a strong positive trend in non-import VAT, in non-import excises, as well as in income tax revenues (Charts 3c and 3d). Also, the abrupt increasing trend in excises on imported goods suggests that policy measures put in place during this period have also added to the strong revenue performance. However, low income tax collections hold back further progress.

9. **Income taxes generate the weakest revenue collections.** At just 2.9 percent of GDP, Nepal's income taxes fall short in comparison with LICs, whose income taxes average to 5 percent of GDP. In the region, only Bangladesh, Maldives[4] and Sri Lanka have as low income tax revenues as Nepal. India, China and other EMs generally have income tax revenue over 5 percent of GDP, and most reach up to 8 percent of GDP. On the other hand, the revenue sources that are based on consumption and imports, such as taxes on goods and services, including VAT and excises, and trade taxes yield collections comparable with those seen in the region and in other LICs.

[4] Note however that Maldives relies intensively on trade taxes, overcompensating for the low income taxes.

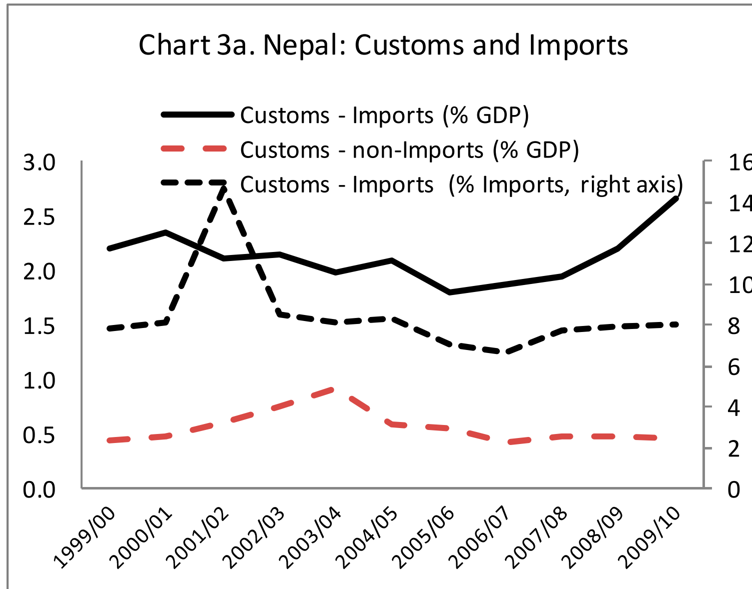


Chart 3a. Nepal: Customs and Imports
Customs - Imports (% GDP)
Customs - non-Imports (% GDP)
Customs - Imports (% Imports, right axis)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
16
14
12
10
8
6
4
2
0
1999/00
2000/01
2001/02
2002/03
2003/04
2004/05
2005/06
2006/07
2007/08
2008/09
2009/10

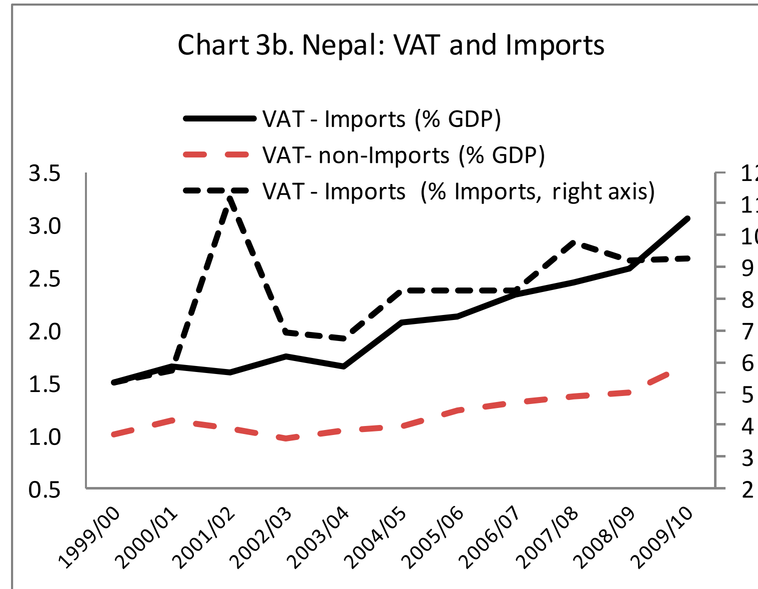


Chart 3b. Nepal: VAT and Imports
VAT - Imports (% GDP)
VAT- non-Imports (% GDP)
VAT - Imports (% Imports, right axis)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
12
11
10
9
8
7
6
5
4
3
2
1999/00
2000/01
2001/02
2002/03
2003/04
2004/05
2005/06
2006/07
2007/08
2008/09
2009/10

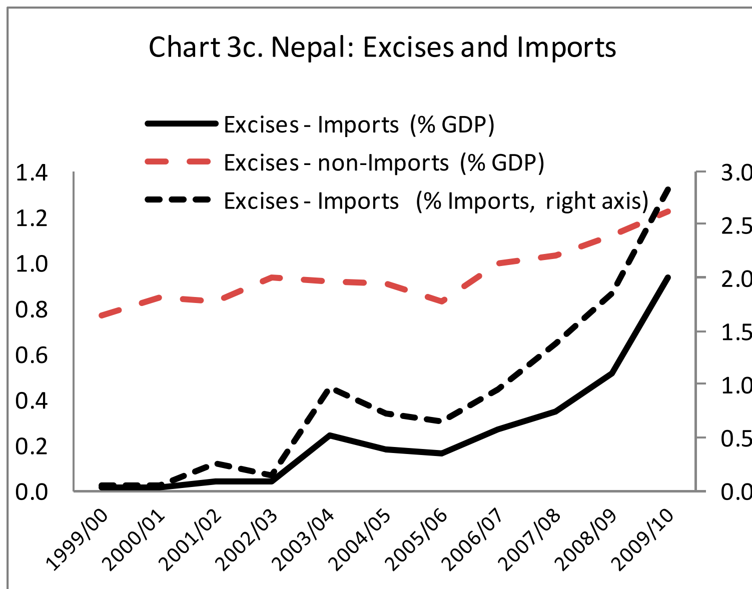


Chart 3c. Nepal: Excises and Imports
Excises - Imports (% GDP)
Excises - non-Imports (% GDP)
Excises - Imports (% Imports, right axis)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1999/00
2000/01
2001/02
2002/03
2003/04
2004/05
2005/06
2006/07
2007/08
2008/09
2009/10

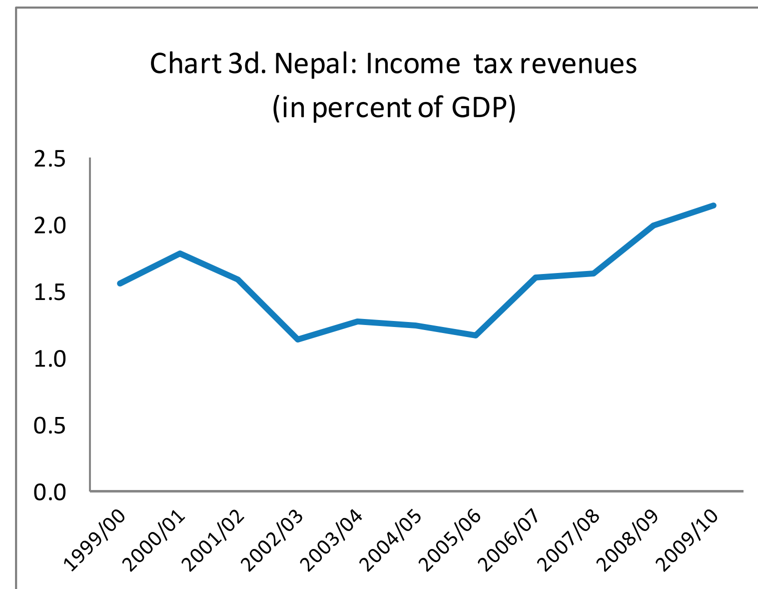


Chart 3d. Nepal: Income tax revenues
(in percent of GDP)
2.5
2.0
1.5
1.0
0.5
0.0
1999/00
2000/01
2001/02
2002/03
2003/04
2004/05
2005/06
2006/07
2007/08
2008/09
2009/10

Table 2. Tax Revenue Structure

Country	Revenues from Taxes on Goods and Services (% revenues)	Income Taxes Revenues (% revenues)	Trade Taxes Revenues (% revenues)
Nepal	45.5	22.0	30.3
LIC average	39.5	32.9	23.0
India	39.6	44.4	8.9
China	56.6	25.7	5.1
Thailand	45.6	46.7	4.7
Vietnam	41.3	35.7	18.7
Indonesia	40.2	50.9	3.6
Philippines	44.4	44.4	6.0
Korea	37.4	45.4	5.5
Bangladesh	38.3	25.9	32.1
Bhutan	38.3	58.5	3.2
Maldives	22.6	9.4	67.3
Sri Lanka	51.9	21.8	16.5

Data sources: WEO (data as of 2010), GFS (data as of 2009).

Table 3. Tax Revenue Structural Changes-Annual Averages, 2006-2010

	change in percent of GDP	nominal percent change	elasticity with output	elasticity with imports
Total tax revenues	0.96	27.7	2.3	1.4
Import-related tax revenues	0.51	29.3	2.5	1.5
Domestic sources tax revenues	0.45	26.2	2.1	1.3

Source: IMF Staff estimates.

Table 4. Tax Revenue Collections

Country	Total tax revenues (% GDP)	Revenues from Taxes on Goods and Services (% GDP)	Income Taxes Revenues (% GDP)	Trade Taxes Revenues (% GDP)
Nepal	13.2	6.0	2.9	4.0
LIC average	15.2	6.0	5.0	3.5
India	16.9	6.7	7.5	1.5
China	17.5	9.9	4.5	0.9
Thailand	16.9	7.7	7.9	0.8
Vietnam	23.0	9.5	8.2	4.3
Indonesia	11.2	4.5	5.7	0.4
Philippines	13.3	5.9	5.9	0.8
Korea	16.3	6.1	7.4	0.9
Bangladesh	8.1	3.1	2.1	2.6
Bhutan	9.4	3.6	5.5	0.3
Maldives	15.9	3.6	1.5	10.7
Sri Lanka	13.3	6.9	2.9	2.2

Data sources: WEO (data as of 2010), GFS (data as of 2009).

Issue # 2: Eroded tax bases due to extensive incentives

10. **Two facts indicate the erosion of tax bases in Nepal due to excessive exemptions and tax incentives.**

- **The revenue productivity in Nepal is weak, both for VAT and income taxes.** Revenue productivity measures the amount of revenue in percent of GDP collected for each percentage point of the tax rate; in other words, the tax productivity proxies for the size of the tax base (as percent of GDP[5]) that is captured in tax collections. Low revenue productivity signals either weaknesses in revenue administration or extensive erosion of the tax base through tax exemptions and incentives. Though the 0.35-0.40 VAT productivity in Nepal appears strong compared to the productivities of neighboring LICs (e.g. Bangladesh), it is slightly lower compared to other LICs and significantly lower compared to productivities of 0.60 or more in India, China and other Asian EMs (Table 5). Similarly, the income tax yield at 0.12, though better than the income tax yields of Bangladesh or Sri Lanka, is much below levels of 0.20 or more around the region and in LICs.

[5] Differences in the composition of GDP can also affect revenue productivity measures. For example, a country with low consumption would have a low VAT productivity, or a country with low corporate profits would have a low CIT productivity.

- **Excessive exemptions and tax incentives have led to a low total tax rate**. General tax rates are not inappropriate in Nepal. A CIT rate of 30 percent seems to be the norm around the region. Justified probably by tax competition arguments, the standard CIT rates are lower in Nepal, Bangladesh and Sri Lanka (Table 6). Also, PIT and VAT rates are in line with those in neighboring countries. However, the low total tax rate reinforces the point that tax incentives contribute to weak revenue productivity in Nepal. The total tax rate represents the total amount of taxes payable by businesses (except for labor taxes) after accounting for deductions and exemptions as a percentage of profit. The total tax rate in Nepal is significantly lower compared to India, China or Sri Lanka, though broadly in line with the rest of the countries (Table 6).

11. **Though tax incentives are generally popular among developing countries trying to attract investment and promote exports, there is room to streamline the incentives to improve their effectiveness.** Two points are worth emphasizing in Nepal's case, given the incentives prevalent in Nepal and the stated policy objectives. First, tax holidays and tax rebates in Nepal tend to favor short-run projects and are prone to tax avoidance.

Table 5. Productivity of Tax Revenues

Country	Income tax yield	Income tax yield using the total tax rate	VAT yield (GDP-based)	VAT yield (consumption-based)
Nepal	0.12	0.09	0.35	0.39
LIC average	0.19	0.10	0.40	0.43
India	0.25	0.22	0.67	0.99
China	0.15	0.18	0.58	1.16
Thailand	0.26	0.26	1.10	1.63
Vietnam	0.33	0.33	0.95	1.31
Indonesia	0.19	0.20	0.45	0.67
Philippines	0.20	0.20	0.49	0.59
Korea	0.33	0.23	0.43	0.61
Bangladesh	0.07	0.06	0.20	0.24
Bhutan	…	0.13	…	…
Maldives	…	0.16	…	…
Sri Lanka	0.14	0.05	0.31	0.36

Data sources: WEO (data as of 2010), GFS (data as of 2009).

Note: Revenue yields are calculated as the ratio of revenue collections as percent of GDP (or consumption, in the case of VAT) over the respective tax rate. Standard corporate rate used for income tax.

Table 6. Tax Rates

Country	CIT standard rate	PIT rates	VAT standard rate	Total rate (% profit) 1/
Nepal	25	15-35	13.0	38.8
India	30	10-30	10.0	64.7
China	30	5-45	17.0	78.5
Thailand	30	10-37	7.0	37.2
Indonesia	30	5-20	10.0	37.6
Philippines	30	5-32	12.0	49.4
Korea	22	6-35	10.0	31.9
Bangladesh	27.5	…	15.0	35.0
Bhutan	30	…	…	40.6
Maldives	…	…	…	9.1
Sri Lanka	20	5-35	15.0	63.7

Sources: WDI, Price Water Coopers, ADB.

1/ The total rate is calculated in the WDI (2009) as the total amount of taxes payable by businesses, except for labor taxes, after accounting for deductions and exemptions, as a percentage of profit.

Table 7. Trade-offs of Different Tax Incentives

Advantages	Disadvantages
1. Lower CIT rate	
·Simple to administer ·Revenue costs are more transparent	·Largest benefits go to high-return firms that are likely to have invested even without incentive ·Invites tax avoidance through high-tax enterprises shifting profits to low-tax ones via transfer pricing (intracountry and international) ·Acts as windfall to existing investments ·Unlike specific benefits, may not be tax spared by home country authorities
2. Tax holidays	
·Simple to administer ·Allows taxpayers to avoid contact with tax administration (which may be important if it is complex or corrupt)	·Same as lower CIT rates, except might be tax spared ·Attracts short-run projects ·Invites tax avoidance through the indefinite extension of holidays via creative re-designation of existing investment as new investment ·Creates competitive distortions between old and new firms ·Revenue costs are not transparent unless tax filing is required, in which case administrative benefits are foregone
3. Investment allowances and tax credits	
·Can be targeted to certain types of investment with highest positive spillovers ·Revenue costs are more transparent	·Distorts choice of capital assets in favor of short-lived ones, since a further allowance is available each time an asset is replaced ·Qualified enterprises may attempt to abuse the system by selling and purchasing the same assets to claim multiple allowances ·Greater administrative burden ·Discriminates against investments with delayed returns if loss carry-forward provisions are inadequate
4. Accelerated depreciation	
·All of the benefits of investment allowances and credits ·Does not generally discriminate against long-lived assets ·Moves the CIT closer to a consumption-based tax, reducing the distortion against investment typically produced by the regular CIT	·Some administrative burden ·Discriminates against investments with delayed returns if loss carry-forward provisions are inadequate
5. Exemption from Indirect taxes (VAT, import tariffs, etc.)	
·Allows taxpayers to avoid contact with tax administration (which may be important if it is complex or corrupt)	·VAT exemptions may be of little benefit - under regular VAT, tax on inputs is already creditable; outputs may still get taxed at later stage ·Prone to abuse - easy to divert exempt purchases to unintended recipients
6. Export Processing Zones	
·Allows taxpayers to avoid contact with tax administration (which may be important if it is complex or corrupt)	·Distorts locational decisions ·Typically results in substantial leakage of untaxed goods into domestic market, eroding the tax base

Source: Fletcher (2002), Botman et al (2008).

Second, VAT exemptions should not be applied for the purpose of social benefits, because they are not guaranteed to be reflected in the final product's price and, when benefits take place, they go proportionally more to those who spend more.[6] Table 7 provides a list of the trade-offs of various tax incentives.

12. **Compared to other countries in the region, tax incentives in Nepal stand out in several ways.** Appendix I provides a comparison of tax incentives in Nepal and in various other countries in the region. Incentives are very popular in the region as in developing countries in general. They seem to apply in Nepal to similar types of companies and conditions as in other countries. However, the eligibility criteria for tax incentives in Nepal apply widely and are not conditional on outcomes. More specifically, Nepal's tax incentives appear weak in four main aspects. First, tax holiday time horizons seem slightly longer in Nepal. Second and more worrisome are tax rebates which appear indefinite in Nepal compared to other countries. Third, accelerated depreciations, which are seen as a more effective form of incentive, seem not as prevalent in Nepal compared to the region. Accelerated depreciation and targeted investment allowances can be used more broadly as they are more efficient and effective to attract investment. They can be specifically linked to the investment amount in the targeted sectors or locations and therefore better ensure investments actually take place. Fourth, the exemptions on VAT and customs in Nepal seem more generous than in neighboring countries.

D. Tax Policy Reform Options

13. **The recent fast revenue growth in Nepal is likely unsustainable.** Revenues gained around one percentage point of GDP annually. Part of these gains can be attributed to long-lived factors, such as improved administration or tax policies. However, another significant factor behind the gains is unsustainable strong import growth. As a result, the strong growth registered in recent years cannot be expected over the medium-term. The dramatic import expansion occurred on the back of a remittances boom that is likely to reach a steady-state. At the same time, continued trade liberalization will lower the prevalence of import-related revenues.

14. **Against this background, revenue policy efforts are needed over the coming years.** Policy efforts will have to compensate the revenue loss due to the import adjustment. Beyond that, further efforts are needed to continue increasing the ratio of revenue to GDP. These efforts are necessary to partly finance

[6] VAT exemptions seem to be prevalent in Nepal, rather than zero-rating. Exemptions are thought to weaken the VAT chain of enforcement, while zero-rated VAT goods are more difficult to administer but provide incentives to increase the value of inputs.

development-related spending in order to ensure higher sustained growth, and to safeguard economic stability. Although the scope for administrative improvements may be large, these need to be supported also by tax policy changes. Moreover, some tax policy measures might be needed in order to reduce distortions and administrative costs.

15. **There are two main tax policy areas that Nepal could focus on in order to improve revenue collections and more effectively achieve its growth objectives: rationalization of VAT exemptions, and modification of corporate tax incentive schemes.**

- **Various VAT exemptions should be eliminated as they erode the tax base and are not effective in lowering the tax burden on intended beneficiaries**. VAT exemptions are not effective in lowering the tax burden on specific goods and weaken the VAT chain of enforcement. Furthermore, VAT is not a targeted instrument for achieving social policy objectives, as the benefits go proportionally more to those who spend more. This argument applies in particular to food or electricity, which are exempt for social policy reasons. In general, VAT exemptions should be in place only when it is not feasible to tax that sector. Some specific measures for Nepal would involve removing the exemptions on electricity, on any gold purchases that are not investment gold, on silver, and on cooperatives and agricultural companies with turnover above the presumptive tax threshold. If the elimination of such exemptions would achieve an increase in the VAT productivity from 0.35 to 0.4, revenue collections would increase by about 0.7 percent of GDP. Furthermore, there is scope to similarly eliminate some custom duty exemptions.

- **Income tax incentives could be reformed to improve targeting, thereby increasing revenue productivity and collections.** Specific measures could involve conditioning tax holidays and rebates on investment, expiring tax rebates earlier, and increased use of investment tax allowances and accelerated depreciations. Such measures could increase the CIT productivity from 0.12 to 0.18, in line with neighboring countries, and yield revenue gains of up to 1.5 percent of GDP.

16. **In addition, several gains can be achieved by simplifying current revenue systems.** The first candidate for such simplification is the elimination of certain low-yielding excises. These excises create administrative burdens not justified by their revenue collections. At the same time, as import custom duties continue to be reduced, the foregone revenues could be replaced by higher excises. Similarly, export duties in place for recording purposes could be eliminated. These reforms would ease administrative burdens, freeing capacities for improving collections and audits. They would also lower the tax-filling burden on businesses, by simplifying rules and procedures. The net impact on revenue collections might be neutral. Lastly, in terms of revenue administration measures, a very promising revenue administrative measure would be to improve collections performance at the Large

Taxpayers' Office, in line with international norms, rather than expand the tax base to businesses or industries with low revenue collection potential.

17. **Lastly, two other smaller revenue sources – presumptive tax and property tax – also appear as good areas to strengthen revenues.** The presumptive tax fee appears very low, representing less than 1 percent of the threshold turnover. Anecdotal evidence also suggests that property taxes, which are administered by local governments, are weak, as property values do not accurately reflect recent real estate price developments.

Table 8. Nepal: Options to Increase Tax Revenues

Policy	Potential gain (% GDP)
Increase the income tax yield (from 12 to 18) by expanding the tax base and eliminating exemptions	1.5
Increase the VAT tax yield (from 35 to 40) by eliminating exemptions and improving tax administration through audits and enhanced collections	0.7
Offset custom duty reductions through increased excise rates or customs administration reforms, such as improved valuations and audits	+

Source: IMF staff estimates.

REFERENCES

Asia Regional Integration Center, *Tax Incentives Database*, http://aric.adb.org/tax_incentives.php, Asian Development Bank

Botman, Dennis, Alexander Klemm, and Reza Baqir (2009), "*Investment Incentives and Effective Tax Rates in the Philippines: A Comparison With Neighboring Countries,"* IMF Working Paper WP/08/207.

Fletcher, Kevin (2002), "*Tax Incentives in Cambodia, Lao PDR, and Vietnam,"* IMF Conference on Foreign Direct Investment: Opportunities and Challenges for Cambodia, Lao PDR and Vietnam, Hanoi, Vietnam, August, 2002.

Gerson, Philip, Martin Grote, and Eric Hutton (2010), "*Kenya: Tax Policy Reform*," IMF Technical Assistance Report, June 2010.

IMF Board Paper (2011), "*Resource Mobilization in Developing Countries*," Fiscal Affairs Department, January 2011.

King, John, Graham Holland, Adrien Goorman, and Dag Hansen (2003), "*Nepal: Next Steps in Tax Reform*," IMF Technical Assistance Report, June 2003.

Klemm, Alexander and Stefan Van Parys (2009), *"Empirical Evidence on the Effects of Tax Incentives,"* IMF Working Paper WP/09/136.

Krelove, Russell, Neil Brooks, and Emil M. Sunley (2009), "*Sri Lanka: Reform of Direct and Indirect Taxes*," IMF Technical Assistance Report, November 2009.

Nakayama, Kiyoshi, Mario Mansour, and Peter Mullins (2010), "*The Philippines: Tax Policy at the Crossroads*," IMF Technical Assistance Report, April 2010.

Ntamatungiro, Joseph (2007), "*Cambodia: A Note on the Tax System*," Selected Issues Paper IMF, Country Report No. 07/291

Poirson, Helene (2006), "*The Tax System in India: Could Reform Spur Growth?*," IMF Working Paper WP/06/93.

Appendix I. Regional Comparison of Tax Incentives

Country	Standard CIT rate	Eligibility for Incentives	Tax Holidays	Other Income Tax Incentives	Other Tax Incentives
Nepal	25	underdeveloped or remote locations, exporters, job creation, IT sectors, infrastructure, "special industries" and cooperatives, Special Economic Zones (SEZ)	5-10 years; unspeficied	tax rebates between 10 and 50 percent	custom and excise duty exemptions for exporters, for foreign donor projects, in SEZ; multiple VAT exemptions (see Table 1 for more details)
India	30	Agriculture, mining, manufacturing, power projects, and services, SEZs, IT sector, new industrial projects, location, exporters	10 years, complete tax holiday in SEZ	tax rebates between 30-50 percent	some custom duty exemptions for manufacturing exporters
China	30 (+3 local income tax)	exporters; FDI firms; SEZs (technology zones, development zones, etc.); advanced technology firms	2-5 years; 5-10 years for construction	tax rebates between 15 and 50 percent	customs and VAT refunds for equipment used by FDI companies
Pakistan	39	Manufacturing, agriculture, infrastructure and social, services (IT and telecom), rural areas	5 years	reduced rate of 7.5 percent; tax concessions for exporters first year allowance for plant, machinery and equipment of 90 percent and 75 percent for priority industries and agro-based industries reinvested allowance of 40-50 percent; initial depreciation allowance of 50 percent for plant, equipment and machinery in all sectors	custom duty rebates for certain sectors; rural areas, high-tech industries and exporters; no custom duties on imports of capital goods and machinery

Appendix I. Regional Comparison of Tax Incentives (Continued)

Sri Lanka	20	exporters, IT, oursourcing, agriculture, infrastructure, manufacturing (machinery, textiles, etc.), R&D, turism	3-15 years, usually 5 years; conditional on minimum investment		customs duties on capital goods and on raw materials for certain industries and for exporters
Bangladesh	37.5	exporters, location, publicly traded	7-9 years, between 25 and 100 percent tax rebate;	90 percent tax credit agains export loans and letters of credit;	duty free imports for machinery and spare parts for firms exporting more than 80 percent of production
			tax holiday and concessions for 10 years for exporters and in SEZ	20 percent rebate on domestic sales for exporters, conditional on payment of duties, 5-10 percent cash subsidy on selected export products;	
			publicly traded companies are taxed at 27.5	20-50 percent accelerated depreciation for cost of plant and machinery for new firms	free real estate and infrastructure made available
					Remittance of royalty, technical know-how and technical assistance fees export guarantee scheme
Bhutan	30	small industries, cooperatives, remote locations, IT and IT park, turism, media, transport, education, health, electricity, businesses established after July 2007	5-15 years	exemption on export earnings in convertible currency; up to 25 percent of reinvested profits are deductible; deductible R&D expenses; between 3 and 100 percent infrastructure facilities	sales and customs duty exemptions

Appendix I. Regional Comparison of Tax Incentives (Continued)

from Boltman et al (2008)

Cambodia	20	pioneer or high-tech, job creation, export, tourism, agro processing, infrastructure, energy, rural development, environment, and SEZs	6-9 years from first year of sales or 3-6 years from the first year of profits	9 percent reducet CIT rate, 40 percent special depreciation if not using tax holiday	full exemption on customs duty and VAT for inputs; exemption from 1 percent turnover tax, VAT exemption on inputs/sales to export oriented garment and footwear sectors
Indonesia	30	investment priority sectors, strategic role in economic development, employment creation, location, partnership with cooperatives	3-8 years, usually 3, extended conditional on minimum employment and investment	10 year loss-carry forward in economic development zones in priority sectors (standard carry forward is 5 years); 30 percent investment tax allowance (6 years maximum); accelerated depreciation	50 percent reduction in land and building taxes, reduction in custom duties for capital goods and raw materials; refunds for custom duties and VAT is export intensive (more than 65 percent of sales); VAT, sales and import duty exemptions in bonded zones
Malaysia	28	high technology or resource-based industries, R&D, shipping, fund management, hypermarkets, waste recycling, manufacturing, offshore trading, technical and vocational training, agriculture and agro-based industry, communication, utilities, transportation, hotels, turism, environmental conservation	5-10 years	double deductions for approved training expenditure; industrial capital allowance up to 100 percent of capital expenditure; tax exempt dividends; accelerated depreciation	duty free raw materials and spare parts for exports; import duty and sales tax exemption on machinery and equipment

Appendix I. Regional Comparison of Tax Incentives (Concluded)

Lao PDR	35	remote location	2-7 years	reduced CIT rates between 7.5 and 20 percent; deductable reinvested profits;	exemptions and reductions on custom duty and taxes on imports of tools, spare parts, vehicles used for production, raw materials and semi-processing products for export
Thailand	30	technology, use of domestic sources, job creation, basic and support industries, earn foreign exchange, growth outside Bangkok, infrastructure, energy conservation, environment protection	3-8 years	50 percent CIT rate reduction conditional on minimal capital investment; exemption of withholding tax	exemptions and reduced import duty and VAT on inputs on exports and in certain sectors
Vietnam	28	forestation, infrastructure, construction, mass transit, export production and trading, offshore fishing, agricultural processing, research, sciences, technology, plant variety production and animal breeding	1-8 years	reduced CIT rates after tax holiday, between 5 and 10 percent	VAT and import duty exemptions for export processing; machinery, devices and means of transportation for foreign contractors for ODA projects or exports; import for export or vice-versa for exhibitions; goods imported to form fixed assets; raw materials, parts, accessories and materials for exportation

Sources: Asia Regional Integration Center, ADB;Botman, Klemm and Baqir (2008).