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VAT replacement or better administration? ¹

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Executive summary

VAT revenues in Ukraine are undermined by numerous privileges and low tax compliance due to manipulations and/or outright fraud causing inadequate tax collection and high tax refunds claims. Besides, there are both strong concerns about the vulnerability of the VAT system to corruption and complaints from businesses about delays in refunding.

Feasible options to overcome the low VAT revenue problem include replacing VAT, e.g., with a general sales tax (GST), or improving VAT administration. We argue that a VAT is superior to a GST in Ukraine.

However, VAT administration can be significantly improved. Especially, we recommend

- to introduce VAT accounts tied to supporting measures such as the cash method and automatic refunding of VAT;
- to increase spending on tax administration combined with a reform of the tax administration body (STA), simplify legislation, and favor law enforcement.

We argue that the problems of tax evasion and privileges are closely related. A reduction of tax privileges potentially pushes firms towards more fraud. Better administration (such as due to VAT accounts) makes fraud schemes more expensive such that firms may be inclined to lobby for privileges. Therefore, we argue in favor of further and sustainable reductions of VAT privileges, in particular sector-specific privileges, as a necessary complement to improved tax administration. In this respect, we recommend to re-draft and to enforce the Law on State Aid and to include an assessment of all different forms of direct and implicit subsidies, including tax expenditures, in the regular reports of the Anti-Monopoly Committee to Verhovna Rada.

Resulting higher tax compliance due to better administration and a growing tax base due to diminished privileges might then justify reducing the VAT rate.

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1. The problem

The value-added tax (VAT) is a consumption tax collected at each stage of production and distribution as a fixed proportion of value added and then partially reimbursed as the product is sold. It replaced the Soviet-style turnover tax early in the reform process. However, the share of VAT revenues in the consolidated budget revenues went down from 29.3% in 1997 when the current VAT law was adopted to 16.8% in 2003. The share of VAT revenue to GDP has almost halved from 8.8% to 4.8% over the same period. This signals a significant decline in actual versus potential VAT revenues (for a detailed analysis of recent Ukrainian VAT performance in an international context, see the Appendix).

Although the 2004 tax reform will bring improvements such as a tax base broadening, prohibit tax arrears write-offs, and address VAT refund arrears, the root of the poor VAT performance still lies in the past practice of granting numerous privileges and a low tax compliance due to manipulations and/or outright fraud.

1.1. VAT privileges

VAT privileges in Ukraine come in two types, zero-ratings and exemptions. For zero-rated items, the VAT is not levied on the selling price. The seller receives full credit for the VAT paid on inputs used in production. When goods and services are exempt, the VAT is not applied to respective sales. Unlike zero-rated goods and services, vendors of exempt products are not eligible to receive any credit for the taxes paid on inputs. The denial of input tax credits increases the production cost for the seller, although his value added escapes VAT.

In general VAT privileges diminish the tax base and thus reduce revenues and increase the amount of refunds.² The Ministry of Finance estimates that total VAT privileges in 2003 amounted to a revenue loss equal to UAH 38 bn. Most of this is due to the zero-rating of exports, while other "standard privileges" representing international practice commonly applied in most countries, cost some 3 bn of VAT revenues.³

² However, if tax exemption occur at early production stages, sales by the subsequent businesses acquiring the goods are effectively over-taxed to the extent that inputs prior the exempt stage are not creditable. As a result, the tax base may not be reduced but rather be augmented by a cascading effect.

³ This refers to a number of goods or services because of political socio-economic considerations, technical difficulties, or administrative complexity, and includes financial intermediation, real estate, public administration and defense, edu-

However, the budget loss due to non-standard privileges specific to the Ukrainian VAT system is estimated by the Ministry of Finance to equal some UAH 8 bn in 2003.⁴ Major privileges (with lower bound budget loss estimates in parentheses) include pharmaceutical products (UAH 3066m); agriculture (UAH 936m); newly constructed housing (UAH 526m); periodicals, domestically produced books, and school books (UAH 363m); the car industry (UAH 340m); transport services (UAH 168m) and special economic zones (UAH 86m). Verkhovna Rada cancelled a number of VAT privileges when approving the 2004 budget. While agricultural sector privileges were partially prolonged until 2005, these privileges were terminated by the law "On the State budget 2004," therefore the termination is in force for one year only. We recommend to cancel these privileges permanently.

1.2. Low tax compliance due to outright fraud

Every VAT system is vulnerable to the following methods of tax evasion:⁵

- Non-registration for VAT.
- Transaction is claimed not taxable, is a gift rather than a sale, or that there was an absence of consideration.
- VAT credit is claimed for non-creditable purchases, such as a car used for non-business purposes.
- Understated sales.
- Inflated claims for VAT paid on inputs.
- Credit is claimed for tax paid on inputs used in producing goods exempt from VAT. This is especially possible if a firm sells both exempt and non-exempt goods and services, since it is not always possible to link specific inputs to specific outputs.
- Zero-rated exports are diverted to the domestic market. The producer obtains export papers, claims a refund, and then sells the goods locally.
- VAT is collected by a firm, which does not remit it to the fiscal office, and then disappears. In Ukraine such firms are known as one-day-survive firms.

cation, health and social work, other community and social services, and extraterritorial organizations. As standard VAT systems are destination based, exports are typically zero-rated while imports are taxed.

⁴ Draft law on the budget 2004 (in Ukrainian), Vol. 2, Kyiv, Ministry of Finance, 2003.

⁵ Agha, A. and J. Haughton, Designing VAT systems: some efficiency considerations. *The Review of Economics and Statistics*, Vol. 78, No. 2, May 1996.

The Ministry of Economy estimates the size of the shadow economy in Ukraine in 2003 at 42.3% of GDP.⁶ As international evidence⁷ shows a strong correlation between the size of the shadow economy and tax evasion, this already hints at the existence of a significant problem of tax evasion in Ukraine.

Tax evasion via one-day-survive firms is of special importance in transition economies. According to CEFIR (Centre for Economic and Financial Research), Russian businesses indicate that the use of one-day-survive firms is the cheapest and most widely used VAT evasion scheme for large enterprises.⁸ One-day-survive firms break the VAT collection chain. For simplicity, assume that neither firm A nor B have inventories or capital investments. Moreover, firm A does not pay for inputs, and A's output is used by B as input. Under a normal VAT scheme, the tax is collected from value added of each firm. In case value added of firm A is X and value added of firm B is (Y-X), then VAT revenues will be equal to the tax rate (say 20%) multiplied by the sum of value added of both firms, i.e. 0.2Y. To avoid tax payments firm B creates a – typically small – firm F, that sells a service (which is difficult to value) to B at total price Z. Accordingly, value added of B is reduced by Z. Therefore, the budget revenues collected from firm A and B will be 0.2(Y-Z).

However, firm F disappears before the day its tax liability should be paid to the budget. In this case, the budget loss equals 0.2Z.

Similarly, one-day-survive firms are used by exporters to artificially inflate VAT rebate claims. For example, an exporter may purchase a dummy service from a one-day-survive firm, pays to that firm and then claims VAT paid to that firm to be refunded from the budget while one-day-survive firm disappears without paying to the budget.

Thus, any government policy on VAT must necessarily involve an increase of the cost of tax evasion.

2. A quantitative assessment and feasible solutions

Table 1 reveals that in recent years the weight of VAT arrears in explaining the gap between actual and potential VAT revenues in Ukraine has reduced significantly, while the share of VAT privileges varied but remained high. The unexplained residual in the difference between potential and actual revenues seems far too significant to be due to changes in exports and investments and must therefore at least partially be attributed to VAT evasion.

Table 1. Sources of the gap between potential versus actual VAT revenues in Ukraine (UAH bn)

	2000	%	2001	%	2002	%	2003	%	01-03	%
(1) Potential VAT revenues	24.0	100	29.5	100	31.4	100	38.4	100	99.2	100
(2) Actual VAT revenues*	9.4	39	10.3	35	13.5	43	12.6	33	36.4	37
(3) Tax privileges**	n/a	n/a	7.7	26	12.3	39	11.0	29	31.1	31
(4) Changes in VAT refund arrears	n/a	n/a	1.8	6	1.7	5	-1.1	-3	2.4	2
(5) Changes in VAT arrears	-1.2	-5	6.5	22	2.8	9	0.3	1	9.6	10
(6=1-2-3+4-5) Residual	n/a	n/a	6.7	23	4.4	14	13.3	35	24.4	25

Sources: National accounts, Treasury reports, Ministry of Finance estimates of privileges attached to the draft budget laws, The reports on the budget execution prepared by the Accounting Chamber, Ministry of Finance Budget Overview, January – March 2004, p. 13.

Note: The potential tax base is approximated as final consumption net of VAT. Potential VAT revenues are derived by multiplying this proxy base with the statutory tax rate (20%).

* Net of cash refunds.⁹ Moreover, shifts in production, investment, and exports lead to changes in VAT refund claims in comparison to gross revenues.

** Tax privileges are budget loss estimates of total privileges (except for zero-rated exports) by the Ministry of Finance.

⁶ Message of the President to Verkhovna Rada on external and domestic state of Ukraine in 2003.

⁷ Tanzi, V., Governance, corruption, and public finance: an overview, conference paper, 1999. Available at www.adb.org

⁸ Gorban, M., S. Guriev, I. Levina, Memorandum on introduction of special VAT accounts (in Russian), Moscow, CEFIR, July 2003.

⁹ VAT revenues should also be adjusted for VAT refunds made for future VAT payments, VAT refunds made in expense of excises, mutual cancellation of liabilities. According to the STA Order #209/72 "On the order of VAT reimbursement" reimbursement is made via: transfer of cash from the budget account to the account of the taxpayer; setting an amount of VAT reimbursement against payments of value added tax; setting an amount of VAT reimbursement against other tax payments due to the Central budget of Ukraine.

If we indeed take the residual in Table 1 to be a rough upper-bound proxy for tax evasion, both privileges and tax evasion have over the recent years contributed to the gap between actual and potential VAT revenues in Ukraine in the same order of magnitude, together representing up to 8% of Ukrainian GDP per year.

There appear to be two mutually exclusive policy options available to deal with the low VAT efficiency in Ukraine. First, it is possible to replace the VAT with another tax that will hopefully be more effective. Second, one could improve VAT administration to enhance tax compliance and at the same time reduce tax privileges.

3. VAT replacement

The idea of replacing the VAT with another tax has recently been brought up. First, the Accounting Chamber¹⁰ proposed to replace VAT with some other (perhaps sales) tax. Second, The President of Ukraine named VAT a fiscal threat, and in his yearly message to Parliament in 2004 suggested the Cabinet of Ministers of Ukraine should consider possibilities of replacing VAT with some other tax.¹¹

3.1. Which other tax?

We argue that it is feasible to replace VAT only with another consumption tax rather than increase the burden of the income or profit taxes or to increase import/export duties, which is in general not consistent with foreign trade liberalization. Although the considerations of the consumption taxes versus income taxes also include the regressivity of the consumption taxes in their minuses, the detrimental influence of income taxes on savings and investment are more distortive. In addition, changes in enterprise profit and income taxes imply potential international trade distortions while consumption taxes are neutral to the place of production.

Although there is no unique optimal tax system, for each stage of development some preferred tax structure can be identified. For transition countries, tax administration and compliance are very important, thus we should look for a tax to be easily enforced. Administration costs are usually higher for income taxes than for consumption taxes. Also, decreases in income tax rates yield

¹⁰ The announcement of the Accounting Chamber dated 2 March, 2004 is available at www.ac-rada.gov.ua/Ua/5/200403021.htm - 5k

¹¹ Available at www.ictv.ua/content/publications/economic/lghk_kdruhtrh.html

comparatively higher de-shadowing effects, which is important given the large size of the shadow economy in Ukraine.

Across the world, the role of consumption taxes has recently increased in comparison with other taxes (with the exception of social security). For example, the share of indirect taxes rose from 32% to 38% in other CIS countries and from 32% to 38% in Central and Eastern Europe and the Baltics over the period 1990–2000.¹²

The most broadly known consumption taxes include the VAT, the general sales tax (GST), the turnover tax and excise taxes. We argue against the turnover tax because it stimulates inefficient vertical integration and has a tremendously negative impact on economic growth. The revenue potential of excise taxes is limited. In particular, because Ukraine has borders with countries that have lower excise tax rates, smuggling is likely to rise as excise tax rates are increased in Ukraine. The general sales tax, as applied in the U.S., is a tax collected at the retail level by vendors. It is set as a fixed percentage of the retail price of goods (and some services) and hence should not have the distortive effects of other VAT alternatives.

We argue that the only feasible alternative to a VAT is a GST.

3.2. VAT versus GST in Ukraine: a comparison based on best practice criteria

A. Tax adequacy. A tax should generate meaningful revenues at socially acceptable rates while ensuring regular and stable budget funding.

The tax base of both VAT and GST is in principle equal to final consumption of goods and services. However, as by their very nature services vanish with the transaction, most services are prohibitively expensive to tax via a GST, and the GST tax base is normally reduced to goods consumption.¹³ Although there are services that are also difficult to tax with a VAT, e.g. financial services, VAT still has a broader tax base. Partially this is due to the possibility to levy taxes on business consumption.

As international experience shows,¹⁴ the GST rate commonly does not exceed 10% while VAT rates are usually set above 10%. Any increase in the sales tax rate above 10% will most probably result in less revenue and more cheating.

¹² Mitra, S., Tax systems in transition. World Bank Policy Research Working Paper No. 2947, January 2003.

¹³ For this reason, in the U.S. nearly all services are exempt from the GST.

¹⁴ Ebrill, L., M. Keen, J. Bodin, and V. Summers, *The Modern VAT*, Washington D.C., IMF, 2001.

Thus, replacing a VAT by a GST would most probably result in lower revenues.

B. Distortive effects. A tax should also be evaluated for the extent to which it distorts economic choices.

GST systems are prone to double taxation.¹⁵ In addition, since a GST is almost never levied on services but mostly on goods, the choice of a consumer between goods and services is distorted. **This distortionary effect is smaller for a VAT.**

C. Tax administration and compliance. The full amount of tax revenues should be collected at minimum cost of tax compliance and administration.

Since a GST is collected at the retail sales level, it lacks self-enforcement: producers and consumers are not interested whether the vendor pays GST. The VAT is a tax collected at each stage as a fixed proportion of value added and then partially reimbursed as the product is sold. Therefore VAT payers do care about the VAT paid at previous stages in order to receive full credit according to invoices. I.e., even if the retail trade is "in the shadow" only some (but not all) VAT revenue is hidden from taxation while in the case of a GST no revenue could be collected. Thus, in the case of large shadow economy and overall low tax compliance, retail vendors could escape easily from the inspection by STA (tax administration body), with the value added of all the production chain lost for the budget. On the other hand, the possibilities to falsify refund claims and other widespread tax evasion schemes raise the revenue risk for the VAT. Therefore, both taxes require effective audit and policing.

A GST requires less documentation thereby reducing total compliance costs as compared to a VAT. According to international experience, replacing a VAT with a GST decreases the number of taxpayers.¹⁶ In addition, the introduction of a new GST in Ukraine would result in additional administrative costs of staff training, implementation of new systems, etc.

¹⁵ In the U.S. double taxation of intermediate goods and services is widespread: nearly 40% of GST revenue is collected from business inputs, hence breaking the tax neutrality. Ring R.J., Consumers' share and producers' share of the General Sales Tax. *National Tax Journal*, Vol. 52, No. 1, March 1999.

¹⁶ Mikesell, J., Sales taxes, 1999. Available at <http://www.spea.indiana.edu/pfa/Sales%20Taxes-top-brief.doc>. At the same time, with a VAT the tax administration possesses a natural instrument to regulate the number of taxpayers by setting a threshold for small enterprises above which registration is required.

Therefore, in the absence of refund fraud, in terms of tax administration and compliance a VAT is more preferable for Ukraine than a GST.

Summing up, if an effective tax administration is able to ensure the absence of breaks in the tax chain, a VAT is the more efficient consumption tax in Ukraine.

4. Improving VAT administration

4.1. Which measures?

To deal with VAT evasion, especially via unlawful VAT rebates, the President submitted a draft law proposal to Verkhovna Rada in early April 2004 to introduce special VAT bank accounts. It is intended that these accounts be used exclusively for executing VAT transactions. In addition, the draft law envisages several supporting measures:

- 1) introduction of the cash method for recording tax obligations and tax credit, based on actual receipt of funds from buyers for products sold;¹⁷
- 2) automatic refund of VAT by the State Treasury;¹⁸
- 3) joint responsibility of all participants in the VAT operation chain for VAT law violation on any stage (i.e., all firms are put at risk to lose their right to claim respective amounts of tax credits). A firm may be not allowed to include the amount of VAT paid on inputs into the VAT credit if the supplier of that inputs failed to pay VAT;
- 4) a reduction of the VAT rate from 20% to 17% in 2005 and then to 15% in 2006.

Several deputies submitted two other draft laws on VAT administration. The first one (Deputies V. Khomutinnik and S. Buriak) proposes to introduce special VAT bank accounts, the cash method, automatic refunds and a VAT rate reduction without joint responsibility. The second one (Deputies S. Teriokhin et al.) proposes to simplify tax cash refunding to firms with good reputation by introducing the concept of a "reliable taxpayer" with the consequence of denying cash VAT refunds to new firms. Verkhovna Rada's Finance and Banking Committee members decided to postpone the decision of supporting/rejecting the draft laws until further research

¹⁷ The method currently in use is the first-event method, i.e. tax obligations and tax credit are recorded after either money is received or the goods/services were delivered.

¹⁸ As of now, STA's explicit approval is a necessary condition for the Treasury to issue a refund. This opens room for discretion, and thus potentially also corruption within the STA.

on the issue is conducted, but no later than July 1st.

4.2. VAT accounts and supporting measures

The special VAT bank account is an account with a bank created and used only for the purpose of paying VAT to the budget, to suppliers, and of receiving VAT from customers and from the budget. At the moment, a seller of goods receives payments to its current account; the funds received by the seller include the net price and the VAT amount; the VAT should then be transferred to the government. The introduction of special accounts for VAT implies that payment for goods will have to be split: the net price will go to the current account and VAT will go to the VAT account.

There appear to be both advantages and disadvantages of the proposal. On the positive side, the introduction of special VAT accounts in Ukraine if tied to the cash method and automatic refunding, will:

- increase VAT revenues due to a decrease of unlawful VAT rebates. Special VAT accounts will reduce the incentives to claim illegitimate VAT rebates because it will become impossible to cash in VAT rebates or use them as a means of payment except for paying VAT. Also, they will reduce the number of fraudulent VAT transactions. As VAT money is separated from other monetary flows, more transparency will be introduced and fraud will be more easily detected. Also, the cash method can prevent a buyer from claiming VAT refund without actually having paid for goods/services;
- speed up the process of VAT refunding. Currently, STA's positive decision is required for a refund from the Treasury. According to the proposal, the Treasury will automatically refund provided no violations are found by the STA within 30 days;
- increase transparency and reduce the potential for corruption among STA officials as VAT refunds will no longer depend upon their discretionary approval.

However, exactly because the introduction of special VAT accounts separates VAT money from other monetary flows, it will also:

- cause a decline in the cash flow of enterprises as some funds will be locked into the VAT accounts; the current system of VAT administration allows the enterprises the *de facto* use of the VAT funds for some period of time. This might temporarily stifle business activity and stimulate demand for bank loans, pushing short-term interest rates up, raising the cost of capital. The cost will mostly fall on relatively small businesses given the specific conditions of the Ukrainian economy: for large business organizations, often associated with "friendly" banks, it will be relatively easy to arrange for additional cheap loans; however, introducing the cash method along with special accounts will alleviate the cash-flow problem.
- impose direct costs both on taxpayers (banking fees etc.) and on the government (implementing the system, teaching the staff, etc.) plus indirect cost to the budget (e.g., in the form of foregone taxes on profits that could have been generated by taxpayers on the funds locked in the VAT accounts).

Although VAT accounts tied to the cash method and automatic refunding do have the potential to deal with one-day-firms, they will not completely eliminate all VAT evasion schemes (see the list in section 2.2 above); examples include concentration of value added at the retail sales stage followed by concealment of some cash earnings (understated sales), and false exports (inflated claims for VAT paid on inputs).

Still, the transaction cost for engaging into VAT evasion will be raised by the introduction of VAT accounts tied to the cash method and automatic refunding, thus enhancing VAT compliance.

Resulting higher tax compliance due to better administration might then justify the President's proposal to reduce the VAT rate. However, the tax rate cut itself will also reduce the attractiveness of tax evasion and thus stimulate proper tax compliance. The rate reduction will also compensate enterprises for a decline in the cash flow that will result from introduction of special VAT account.

We recommend not to implement the "joint responsibility" and the "no refunds to new firms" proposals. Joint responsibility will significantly raise the risk of doing business in Ukraine. No refunds to new firms appears neither a fair proposal nor effective against current VAT evasion schemes.

4.3. International experience

The only country that has introduced VAT accounts so far is Bulgaria.¹⁹ VAT accounts were made mandatory there from the beginning of 2003. Simultaneously, Bulgarian authorities took supporting measures to improve the administration of import duties and taxes (including VAT on imports) that have led to more complete customs declarations. Also, the threshold level of sales above which registration as a VAT taxpayer is required was lowered and the number of taxpayers was thereby increased by almost 7%.²⁰

However, the data do not show a sharp increase in VAT revenues in Bulgaria in 2003. VAT revenues from imports increased by 16.4% for 2003 against 2002, while imports grew in nominal terms by 13.2%.²¹ VAT revenues from domestic operations nominally rose only by 0.52%.²² Thus, the experience of Bulgaria shows that, even with an increase in the number of taxpayers, introducing VAT accounts does not necessarily lead to higher VAT revenues from domestic operations. However, initial conditions much different from Ukraine's should be given credit: Bulgaria had a rather effective VAT taxation to begin with (Table 4, Appendix). Also, the introduction of VAT accounts were preceded by the "joint responsibility" rule in 1999-2002 so that VAT accounts were considered as a shift towards a softer, rather than a stricter fiscal regime.²³

4.4. VAT administration and tax evasion

As already indicated, tax evasion depends on three major factors: on the benefit from cheating,

on the probability of being caught, and on the severity of punishment.

Apart from the tax rate, benefits from cheating also depend on overall tax compliance and on whether the government performs its own refund obligations. Hence, both the recently increased government's compliance with its refund obligations and the proposed tax rate reduction will contribute to a reduction of tax evasion.

The probability of being caught depends on the quality of audit. Improper scheduling of inspections, lack of knowledge, insufficient technical capacity, insufficient information about the taxpayers and their business all diminish this quality. Also, the efficiency of the tax audit can be enhanced by redirecting more audit to the spheres where the probability of tax fraud is highest. In this sense, it is conceivable that fraud prevention could include using the history of tax compliance for assessing tax liabilities,²⁴ e.g., by linking a well-defined tax compliance history to the application of automatic refund. However, this must be done in a non-discriminatory way: we do not support the strict application of the "reliable taxpayer" concept proposed by Deputies S. Teriokhin et al. with the consequence of denying VAT cash refunds to new firms.

Tax administration must strictly comply with the tax legislation passed by Verkhovna Rada,²⁵ and STA orders must never contradict legal provisions.²⁶ But low wages of tax administration staff, low probabilities of detection and small fines for tax fraud create incentives for corruption against quality audit. The vicious circle of corruption and cheating results in tax base erosion. However, international experience shows that VAT revenues increase with the level of spending on tax administration.²⁷ This includes the possibility to increase the wages of the tax service employees combined with an automatic lay-off rule for corrupt staff.

Cutting VAT privileges will also diminish corruption since privileges complicate the legislation

¹⁹ The Russian government planned to introduce VAT accounts by July 2004. However, it met with opposition arguing cash flow problems, higher costs and thus higher inflation. The Russian government is now working on introducing "transit" accounts" in 2006. VAT payments will pass through such accounts and then go to the main accounts. Cf. VAT accounts in new form (in Russian). *Russian Tax Courier*, No. 8, 2004.

²⁰ Trunin, I., Special VAT accounts evidence in Bulgaria – main conclusions for Russia (in Russian), mimeo, Moscow, IEPP, 2003. Available at <http://www.iet.ru/personal/trounin/poitogam.pdf>

²¹ VAT on imports was 91.3% of total VAT revenue in Bulgaria for 2003. See

<http://www.minfin.bg/en/documents/others/reports/customs/docs/Analysis%20of%20Customs%20Revenue%20in%20Bulgaria%20Engl.pdf>

²² End-of-year 2003 inflation in Bulgaria was 2.3% and GDP grew by 4% in real terms.

²³ Trunin, I., Special VAT-accounts in Russia: analysis of possible consequences (in Russian), mimeo, Moscow, IEPP, 2003. Available at <http://www.iet.ru/personal/trounin/spezscheta.pdf>

²⁴ T.M. Lee, Value-added taxation: mechanisms, design, and policy issues. Practical Issues of Tax Policy in Developing Countries, World Bank, Washington D.C., April 28 – May 1, 2003. Cf. also GAG/IER, VAT refund crisis In Ukraine: causes, risks, and solutions, Policy Paper Q18, Kyiv, March 2002.

²⁵ IMF Code on Fiscal Transparency.

²⁶ For example, the STA Order on the order of reimbursement of the VAT and the VAT Law are contradictory, and the tax administration is mainly regulated by the Order of STA rather than by the provisions of the Law.

²⁷ Dobrinsky, R., Tax structures in transition economies in a comparative perspective with EU member states, in: Tumpel-Gugerell, G., and P. Mooslechner (eds.), *Structural Challenges for Europe*, Cheltenham, Edward Elgar, 2003.

and create more possibilities for discretion and thus corruption.²⁸

4.5. VAT administration and VAT privileges

While none of the draft laws in section 4.1 proposes to further and sustainably cut VAT privileges, we argue that the problems of fraud and privileges are closely related. A reduction of tax privileges potentially pushes firms towards more fraud. On the other hand, if better administration (such as due to VAT accounts) makes fraud schemes become more expensive, firms are inclined to lobby for privileges or even misreport their types of activities to become eligible for privileges.

VAT privileges are a form of implicit state aid. So far, there is no public information on and no well-defined rules of granting state aid to industry; the targets of state support and the choice of instruments are not based on cost-benefit analysis. Consequently, the process of granting tax privileges is open to bargaining in the decision making body, i.e. the Verkhovna Rada.

5. Recommendations

Feasible options to overcome the low VAT revenue problem include replacing VAT, e.g., with a general sales tax (GST), or improving VAT administration. We argue that a VAT is superior to a GST in Ukraine.

However, VAT administration can be significantly improved. We recommend to introduce VAT accounts tied to the cash method and automatic refunding of VAT, as both supporting measures will alleviate the cash-flow problem of special accounts. We do not recommend "joint

responsibility" as proposed in the President's draft, neither the strict application of the "reliable taxpayer" concept proposed by Deputies S. Terokhin et al. with the consequence of denying cash VAT refunds to new firms. Accordingly, our stance is closest to the draft submitted by Deputies V. Khomutinnik and S. Buriak.

Further, to effectively improve VAT compliance and raise VAT revenues, it is necessary to do both – introduce VAT accounts tied to supporting measures and to further and sustainably cut VAT privileges (for example, those for agriculture products that according to the 6th EU directive should be taxed at a flat rate). Also, we recommend to permanently cancel the privileges terminated by Verkhovna Rada when approving the 2004 budget and to keep the moratorium on granting tax incentives for special economic zones. In addition, exemptions granted for social purposes (including: baby food, text books, goods of special purpose for handicapped, sale of recreation) should be replaced by targeted aid since the VAT is not a good instrument for achieving social goals.

To sustainably diminish incentives for granting sector-specific and region-specific VAT privileges, we recommend to introduce well-defined rules of granting state aid by re-drafting and enforcing the Law on State Aid.²⁹ In particular, we recommend to include an assessment of all different forms of direct and implicit subsidies, including tax expenditures, in the regular reports of the Anti-Monopoly Committee to Verhovna Rada.³⁰

Resulting higher tax compliance due to better administration and a growing tax base due to diminished privileges might then justify reducing the VAT rate (as proposed in the President's draft).

²⁸ Ibid. and Agha and Haughton (1996).

²⁹ This is in line with our general policy stance for rules versus discretion as summarized in GAG/IER, Institutional reforms versus selective targeting? Comments on the draft law "On state support of investment and encouraging investment activity" drafted by the Ministry of Economy, Policy Paper T30, Kyiv, April 2004.

³⁰ Cf. IER, Comment on the Draft Law "On State Aid", Policy Paper A10, Kyiv, October 2003.

Appendix: VAT performance in Ukraine in international context

In order to quantify gaps between actual versus potential VAT revenues, different but related performance indicators can be applied. All of these measures relate actual VAT revenues to statutory VAT rates and proxies of the VAT base, i.e. final consumption.

- Tables 2 and 3 present information on two commonly applied VAT efficiency measures: VAT efficiency is measured as the ratio of VAT revenues collected (net of cash refunds made) to GDP divided by the standard (statutory) rate, i.e. 20% in Ukraine. VAT C-efficiency is calculated as the ratio of collected VAT revenues (net of cash refunds) to total domestic consumption, again divided by the standard (statutory) rate.³¹

While maximum efficiency and C-efficiency ratios are 60%³² and 100%, respectively, the VAT efficiency indicator for Ukraine in 2000 was only 27%. In particular, this implies that everything else held constant as in 2000, a 1% increase in the VAT rate would cause an increase of about 0.277 percentage points in the share of VAT revenues in GDP. By 2003 the VAT efficiency has even declined, to only 24%. This is significantly lower than in EU and corresponds to indicator levels in Sub-Saharan Africa (Table 3). Estimates of VAT C-efficiency in Ukraine in 2000 range from 37% to 45.4%. Again, this is significantly below EU average, Eastern Europe average, and transition economies average, and only slightly above CIS average. According to our own calculations, VAT C-efficiency in Ukraine in 2003 was 33%.

- Table 4 presents an international comparison of estimates of effective VAT rates, i.e. ratios of VAT revenues to VAT base proxies, and relates these to statutory VAT rates.

Notes on the international comparability of national VAT performance indicators

International comparisons of national VAT performance indicators are complicated due to various aspects. While standard exemptions are subtracted from consumption it is almost impossible to adjust for non-standard exemptions. It is hard to define the reduction of the VAT base due to presumptive taxation of small enterprises, very specific products that are not described in national accounts but, nevertheless, are exempt from taxation. Moreover, performance indicators based on national accounts data are not accurate due to first and last months tax base differences and inaccurate measurement of GDP. Comparison across countries that apply income-type versus consumption-type VAT is further complicated since only the latter system (applied in the majority of countries, including Ukraine) allows to credit the purchase of investment against VAT accrued.

The variations of effective VAT rates (Table 4 in Appendix) also reflect different GDP compositions. The relatively low indicators for some high-income EU countries can be explained by a more developed services sector, which implies comparatively low taxable value added. On the other hand, VAT privileges tend to be less widespread and tax compliance is likely to be more efficient in EU countries,³³ resulting in higher VAT revenues.

³¹ Net of items that are exempt from the tax base according to international practice.

³² Given Ukraine's statutory VAT rate and share of consumption in GDP.

³³ Dobrinsky (2003).

Table 2: Summary of VAT performance statistics in Ukraine

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
VAT revenues, UAH bn	1.3	4.5	6.3	8.2	7.5	8.4	9.4	10.4	13.5	12.6
VAT revenues, % of GDP	10.8	8.3	7.7	8.8	7.3	6.4	5.5	5.1	6.1	4.8
VAT revenues, % of consolidated budget revenues	30.3	27.5	27.3	29.3	25.8	25.6	19.5	19.2	22.2	16.8
VAT efficiency, %*	54.0	41.5	38.6	44.1	36.4	32.2	27.7	25.6	30.5	24.0
VAT C-efficiency, %**	79.6	54.4	48.3	54.1	44.6	41.8	36.9	33.1	39.9	33.0
VAT revenue execution, %		95.3	95.3	97.5	85.2	101.3	93.8	89.0	104.5	
Share of VAT revenues from domestic operations in total VAT revenue, %							68.0	62.3	49.6	
Share of VAT revenues from import operations in total VAT revenue, %							32.0	36.4	50.4	

Source: Legeida, N., and D. Sologoub, Modeling value-added tax (VAT) revenues in a transition economy: the case of Ukraine, IER/GAG Working Paper, July, 2003.

Notes: * Ratio of VAT revenue to GDP, divided by standard tax rate.

** Ratio of VAT revenue to consumption, divided by standard tax rate.

GDP and consumption have been taken at consumer prices to calculate VAT efficiency and VAT C-efficiency ratios, respectively.

Table 3: VAT efficiency by region, %

	Sub-Saharan Africa	Asia and Pacific	America	EU +Norway and Switzerland	Central Europe and BRO*	North Africa and Middle East	Small islands
Efficiency	27	35	37	38	36	37	48
C-efficiency	38	58	57	64	62	57	83

Source: IMF staff calculations, according to Ebrill, Keen, Bodin and Summers, 2002 quoted in Legeida and Sologoub (2003).

Notes: * Baltic states, Russia and other countries of the former Soviet Union.

Figures are undated but presumed to represent latest available.

Table 4: VAT rates and VAT compliance in the EU and in selected transition economies

	Statutory VAT rates, %		VAT as % of:		Effective/statutory ratio vis-à-vis:	
	Standard	Other	GDP	Taxable gross value added (Effective VAT rate)	vis-à-vis:	
					standard	adjusted
A. EU member states, 1999						
Austria	20.0	10; 12	8.4	15.5	77.6	94.0
Belgium	21.0	6.0; 12.0	7.2	17.2	82.1	93.1
Denmark	25.0		9.7	24.3	97.3	97.3
Finland	22.0	8.0; 17.0	8.7	20.4	92.7	97.1
France	19.6	2.1; 5.5	8.0	18.6	94.7	97.7
Germany	16.0	7.0	6.9	15.7	97.9	99.2
Greece	18.0	4.0; 8.0	8.0	15.4	85.7	90.7
Ireland	20.0	4.2; 12.5	6.5	17.0	85.0	97.2
Italy	20.0	4.0; 10.0	5.4	10.8	54.1	72.2
Netherlands	19.0	6.0	7.0	16.6	87.2	97.5
Portugal	17.0	5.0; 12.0	8.3	12.7	74.9	79.6
Spain	16.0	4.0; 7.0	6.2	10.7	66.8	71.3
Sweden	25.0	6.0; 12.0	7.1	17.9	71.4	96.6
United Kingdom	17.5	5.0	6.7	14.3	81.9	95.6
EU average	19.7		7.5	16.2	82.1	91.3
B. Transition economies, 2000						
Albania	20.0		7.1	7.9	39.4	39.4
Bulgaria	20.0		8.8	14.4	72.2	72.2
Croatia	22.0		14.0	21.2	96.5	96.5
Czech Republic	22.0	5.0	7.4	11.6	52.9	72.8
Estonia	18.0	5.0	9.3	15.1	83.9	88.9
Latvia	18.0		7.8	11.8	65.6	68.3
Lithuania	18.0	5.0; 6.0; 9.0	7.6	11.3	62.6	66.3
Hungary	25.0	12.0	10.7	19.8	79.2	82.5
Poland	22.0	3.0; 7.0	7.6	11.3	51.4	56.5
Romania	19.0		6.3	8.7	45.9	45.9
Slovakia	23.0		7.8	12.1	52.5	52.5
Slovenia	20.0		10.2	17.7	88.7	88.7
Eastern Europe average	20.6		8.7	13.6	65.9	69.0
Armenia	20.0		6.5	6.6	33.2	33.2
Azerbaijan	18.0		4.1	5.4	29.8	29.8
Georgia	20.0	10.0	9.5	13.8	68.8	72.4
Belarus	20.0		4.8	5.8	28.8	28.8
Kazakhstan	16.0		4.0	6.7	41.6	41.6
Kyrgyzstan	20.0		4.6	5.5	27.4	27.4
Republic of Moldova	20.0	8.0	8.3	8.8	44.2	46.5
Russian Federation	20.0	10.0	6.7	13.6	68.2	71.7
Tajikistan	20.0		2.5	3.5	17.6	17.6
Ukraine	20.0		5.6	9.1	45.4	45.4
CIS average	19.4		5.7	7.9	40.5	41.4
Transition economies average	20.0		7.3	11.0	54.4	56.5

Source: Dobrinsky (2003).

Note: *The adjusted rate is calculated taking account of multiple tax structures. The effective/statutory ratio is calculated as a weighted average of the different rates where the shares of the corresponding product groups in final consumption are used as weights.

** Taxable gross value added excludes standard privileges.