Trade liberalisation in Transnistria.

Estimated impact of an import tariff reduction and proposals for alternative revenue sources

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List of Abbreviations

Abbreviation	*Meaning*
ATP	Autonomous Trade Preferences
CIS	Commonwealth of Independent States
DCFTA	Deep and Comprehensive Free Trade Agreement
CIT	Corporate Income Tax
EU	European Union
EUBAM	European Union Border Assistance Mission
EUR	Euro
GDP	Gross Domestic Product
m	Million
MFN	Most Favoured Nation
MDL	Moldovan Leu
NTB	Non-Tariff Barriers
PIT	Personal Income Tax
SME	Small and medium sized enterprises
UAH	Ukrainian Hryvnia
USD	United States Dollar
VAT	Value Added Tax
WTO	World Trade Organisation

Executive summary

Transnistria's current duty-free access to the EU market expires at the end of 2015. Should it wish to maintain duty-free access, it needs to abolish import tariffs for EU goods at the start of 2016. As trade agreements are based on reciprocity, this condition is understandable: when one side provides duty-free access to goods from a trading partner, it is only logical to expect the same duty-free access in return.

Duty-free access to the EU market matters a great deal to Transnistria's exporters and to its economy in general. An earlier assessment carried out by Berlin Economics[1] suggests that losing preferential access would result in a considerable economic shock, with an expected permanent decline in GDP of 5%. As such, the Transnistrian authorities would do well to abolish their existing import duties in order to retain their exports' duty-free status.

This raises another concern, however: how should Transnistria make up the lost import duty revenue if tariffs on goods imported from the EU are abolished? We estimate the revenue loss in 2016 at USD 12.4 m. This decline is equivalent to an estimated 4.3% of government revenues or 1.3% of GDP in 2016.

As Transnistria's budget deficit is already very high (12.3% of GDP in 2014), doing nothing is not an option for Transnistrian authorities. The loss in revenue needs to be accounted for, as it could otherwise pose a threat to public finances.

Amid recent painful measures to reduce public expenditures – including wage cuts in the public sector – there is little room for cutting expenditures further. Thus the only viable option for the Transnistrian government is increasing revenue. This could mean either extending existing revenue sources or creating new revenue sources. Yet extending existing revenue sources would mean increasing the gross all-stages turnover tax, currently the main source of income for the public budget. However, the gross turnover tax is a problematic tax instrument as it burdens companies regardless of their financial health, distorts competition in favour of big integrated companies, and is prone to lobbying and difficult to combine with international trade. Its extension is not advisable, as it would produce significant negative side effects.

Instead, we would argue for the Transnistrian government to reform its tax system and introduce new modern revenue sources. Indeed, the necessity of compensating the import duty loss could be an opportunity to introduce an efficient and simple VAT system.

It is no coincidence that VAT forms the backbone of government income in over 80% of all economies. VAT provides stable and sufficient fiscal income, promotes exports, enhances the growth potential of all companies regardless of their size, and is in accordance with good

[1] Berlin Economics (2013): "The Impact of the EU-Moldova DCFTA on the Transnistrian Economy: Quantitative Assessment under Three Scenarios".

governance. Thus introducing VAT would bring Transnistria in line with accepted international standards.

How should this be accomplished? As time is of the essence, with additional revenue needed in 2016, introducing VAT should be done in a two-stage process. Stage 1 would entail a limited VAT roll-out, with VAT co-existing alongside the present gross turnover tax. During this phase the VAT rate would be set at a low level, and only large companies would be required to charge VAT. Thus during the first stage VAT would already generate revenue, and provide valuable experience to inform the introduction of the full-fledged VAT.

Once the first stage of the new VAT system is working well, the second stage of VAT introduction would begin. The mandatory revenue threshold would be lowered so that medium-sized companies would become liable for VAT. At the same time, the general VAT rate would be raised to a level that would generate enough revenue to replace the gross turnover tax, which would be abolished.

During the first phase we recommend setting the initial VAT rate at a relatively modest 7%. An initial estimate suggests that this would generate revenue of around USD 26 m in 2016 if implemented at the beginning of the year. Thus the income would be more than sufficient to compensate the expected revenue loss, helping to reduce the current budget deficit.

It is important to mention here that an efficient tax administration is a pre-requisite for both the success of the VAT introduction and the prevention of fraud. To ensure efficient tax administration, a highly developed IT system with simple software solutions is needed to allow electronic tax declarations. If IT-based VAT administration is combined with strictly non-cash payments of VAT, tax compliance is likely to be high, and to increase gradually for the tax system as a whole.

Clearly, the VAT roll-out needs to be accompanied by dedicated training for the tax administration, necessitating training manuals and information materials for companies and consumers. Here the Transnistrian authorities should seek the support of international partners, which is likely to be available. If all this is ensured, the first stage of the VAT introduction could be completed within 6-9 months, while the entire process of introducing VAT (first and second stages) would take around 18 months.

The complete VAT system would form the backbone of Transnistria's public finance. Not only would it provide stable revenue, it would also be a means to reduce the grey economy and strengthen the tax basis of existing taxes. Thus the necessity of abolishing import duties on EU goods could lead to much wider benefits for the Transnistrian economy: Transnistria would signal it is open for international trade, while also bringing its tax system in line with international standards. This combination of trade liberalisation and tax system modernisation could provide a welcome boost to the Transnistrian economy and raise the living standards of the population.

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1 Introduction

Moldova's left bank (hereafter: "Transnistria") is a small, open economy. As such, it is even more dependent on foreign trade than the rest of the country. With a trade-to-GDP ratio of 210% in 2014, foreign trade plays a critical role in the Transnistrian economy.

However, duty-free access to the important EU market is at risk, as the temporary extension of the Autonomous Trade Preferences (ATP) regime to the Transnistrian region will expire at the end of 2015. Without those preferences the GDP of the region would permanently decrease by 5%[2], resulting in pronounced economic hardship for the population.

To avoid such a scenario, the Transnistrian region should implement the Deep and Comprehensive Free Trade Agreement (DCFTA), which has been in effect in the rest of Moldova since September 2014. However, implementation currently hinges on a number of factors. One major barrier is the refusal of Transnistrian authorities to abolish import duties on EU goods; as long as there is no clear commitment to abolish tariff barriers for EU goods entering the Transnistrian region, the EU is not in a position to grant duty-free access to the EU market.

The Transnistrian administration argues that those import duties are an important source of revenue, and abolishing them would cause a revenue loss that is difficult to compensate through other fiscal instruments. To assess those objections this paper asks two main questions:

- What are the fiscal implications of removing import duties on EU goods?
- Which other fiscal instruments could make up for the potential revenue shortfall?

This paper seeks to provide arguments for a fact-based analysis to provide new momentum for a DCFTA implementation in Transnistria.

[2] Berlin Economics (2013): The Impact of the EU-Moldova DCFTA on the Transnistrian Economy: Quantitative Assessment under Three Scenarios.

2 Estimated revenue loss from removing import duties on EU goods

For any government contemplating reducing or abolishing certain tariffs on imports, the expected loss in fiscal revenue is one of the main concerns that needs to be considered. In the case of Transnistria, this adjustment of tariff rates would have to take place in 2016. In order to assess the potential revenue loss, one first needs to predict how imports – and thus import duties – are likely to have developed by 2016 (section 2.1). This forecast of import duties which assumes no change in tariffs (benchmark scenario in section 2.2) can then be used as a baseline against which a scenario with the tariffs on EU imports removed can be compared (section 2.3).

2.1 Forecast of imports in 2016

Import demand fluctuates significantly over time, leading to ebbs and flows in import duties. There are two main factors that affect import demand and explain most of the fluctuations in a region's imports over time.

1. GDP development: If the economy grows strongly, import demand from consumers and companies also goes up. On the other hand, falling economic activity can significantly reduce import demand.
2. Exchange rate: The exchange rate determines the price of imports. If the Transnistrian Ruble appreciates against the currencies of its trading partners, it is cheaper to import goods; if the exchange rate of the Transnistrian Ruble falls, imports become more expensive and demand will decrease.

Below we have outlined our expectations for those two factors, and estimated what they mean for import demand in 2016.

GDP development

In 2015 and also 2016 a slowdown in economic activity is the most likely scenario for the Transnistrian economy. Indeed, the latest economic data[3] suggest that the slowdown has already started. The recession of the Transnistrian economy is due to a number of, mostly, external factors. For one, most of Transnistria's trading partners in the CIS are facing economic problems of their own. Indeed, the International Monetary Fund (IMF) expects recessions in the Russian Federation, Ukraine, and Moldova in 2015[4]. This, in combination with increased administrative barriers for Transnistrian exports through Ukraine, means less demand for exports, and acts as a brake on economic growth. In addition, demand is negatively affected by a decline in remittances, especially from Russia.

[3] GDP declined by 18.3% in the first quarter of 2015, compared to the same period a year ago, http://www.mepmr.org/gosudarstvennaya-statistika/informacziya/62-o-soczialno-ekonomicheskom-polozhenii-pmr/2462-soczialno-ekonomicheskoe-razvitie-pmr-za-yanvar-mart-2-015-goda-

[4] IMF World Economic Outlook 2015

Furthermore, in order to keep the exchange rate of the Transnistrian Ruble against the US dollar stable, the Transnistrian Republican Bank has to run a very tight monetary policy, which – especially in the current economic climate – reduces economic growth further.

Against this backdrop we expect negative growth rates for real GDP in 2015 and 2016. For the purpose of this analysis, we make the following assumptions for real GDP growth:

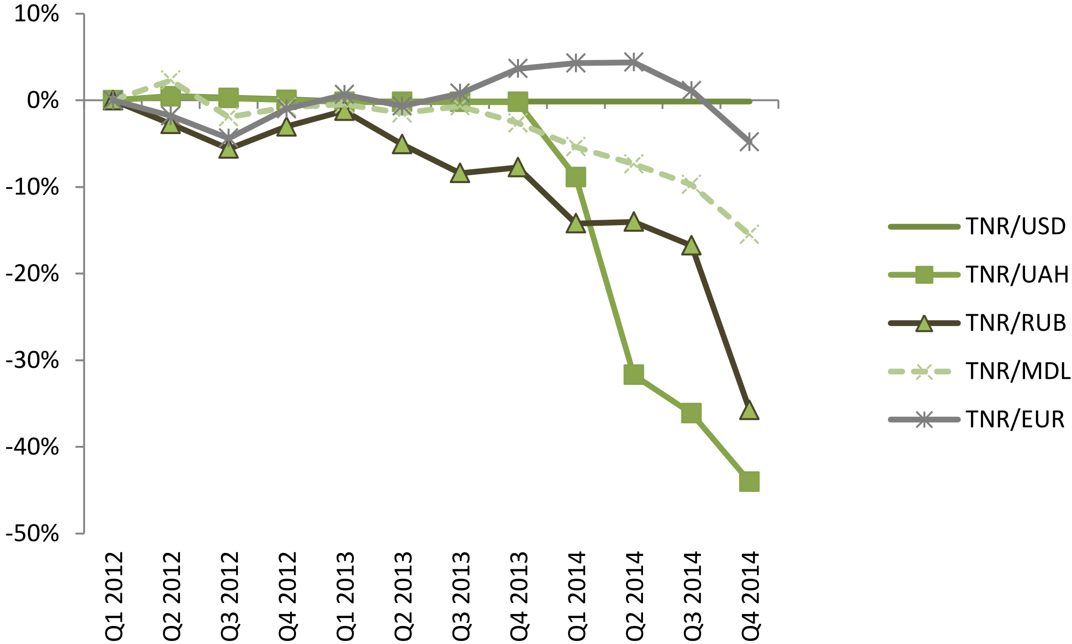
- 2015: - 5.0%
- 2016: - 2.5%

The expected decline in GDP is likely to reduce demand for imports and in turn import duties in 2015 and 2016.

Exchange rate

The exchange rate is the second major factor influencing import demand. Figure 1 below shows the exchange rates of the Transnistrian Ruble against the currencies of selected trading partners over the last two years. The chart suggests that many of Transnistria's trading partners have devaluated their currencies over the past year – the Ukrainian Hryvnia, for example, depreciated by over 40% against the Transnistrian Ruble. The Russian Ruble also lost around 40% of its value against the Transnistrian currency. Finally, the Moldovan Leu depreciated by about 20% since the beginning of 2013.

Figure 1: Development of exchange rate of main trading partners



Source: Transnistrian Republican Bank

During this period the Transnistrian Central Bank has kept the exchange rate of the Transnistrian Ruble to the US Dollar constant. As a result, imports have become much cheaper, supporting

import demand. At the same time, this presents a very difficult situation for exporters, as exports have become much more expensive. Indeed, as the example of Tirotex shows, when burdened with an overvalued exchange rate Transnistrian companies find it difficult to compete at all.

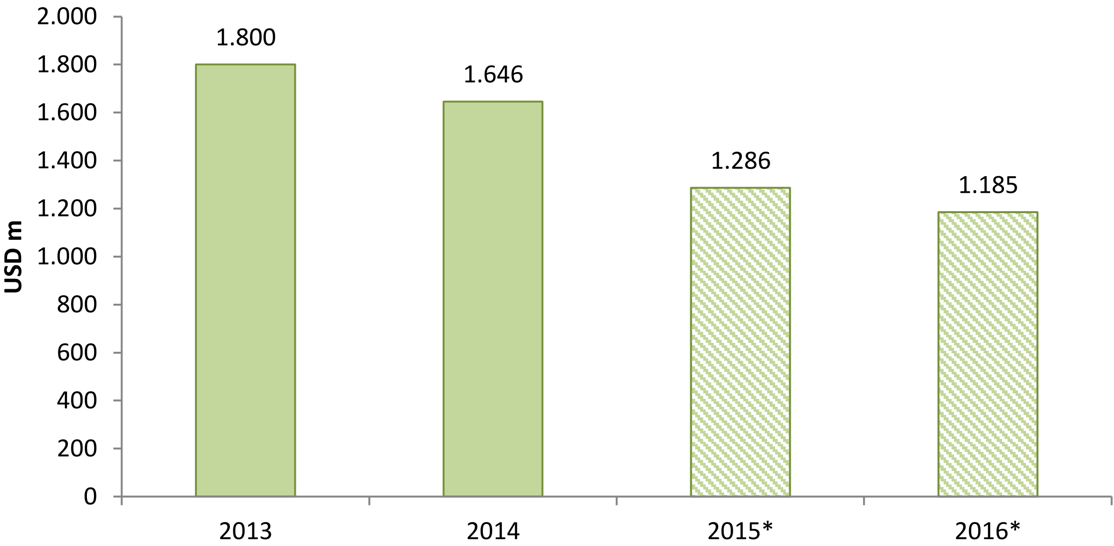
In addition, by fixing the exchange rate against the US dollar, the Central Bank has to maintain a very restrictive monetary policy, which results in high interest rates at a time when companies and consumers need cheap credit.

Against this backdrop, we believe the Transnistrian Ruble needs to devaluate against the currencies of its main trading partners, and our forecast assumes that such devaluation has to take place before 2016. To reflect this, we assume a 15% decline of the Transnistrian Ruble against the US Dollar in 2015, and another 5% decline in 2016.

Resulting import demand

What does this mean for the import demand in 2016? With GDP expected to decline significantly and a depreciation of the domestic currency likely, the two main drivers of import demand point towards a significant decline of imports over the next two years. Consequently, we expect imports to decline to USD 1,185 m by 2016. This would mark a 28% decline of imports in comparison to 2014 levels, and would take a corresponding toll on import duties.

Figure 2: Transnistrian imports 2013-2016



**Forecast*
Source: Own forecast based PMR Customs data

2.2 Benchmark scenario: Revenues from import duties if tariffs remain unchanged

The expected decline of imports will lead to lower revenue from import duties. Based on current tariff rates – that is, assuming rates remain unchanged from 2014 levels – and our forecast for imports, we expect import duties to decline to USD 44.5 m in 2016. In comparison, import duties were USD 62.2 m in 2014.

Duties on goods imported from the EU are likely to reach USD 13.1 m in 2016. As such, they account for about 29% of total revenue from import duties.

Table 1: Predicted revenues from import duties in 2016, USD m

	EU	Non-EU	Total
Revenues from import duties	13.1	31.4	44.5

Source: Own calculations based on PMR Customs data

The predicted income of USD 44.5 m from import duties in 2016 is the amount of duties that can be expected if no change to import tariffs takes place. In the following sub-chapter, we estimate how revenue from import duties in 2016 will decline should Transnistria reduce tariff rates for some or all goods imported.

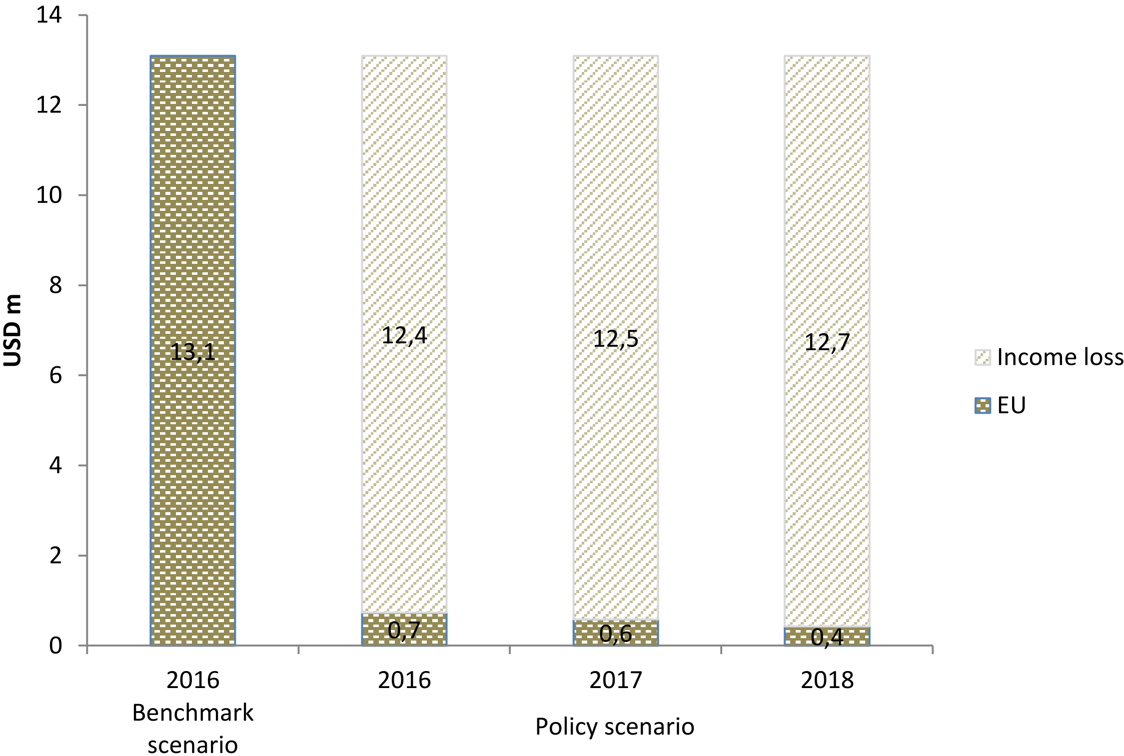
2.3 Policy scenario: Transnistria abolishes import duties on EU imports

In this chapter we assess how tariff revenue declines if the Transnistrian government reduces tariff rates on EU goods.

Policy scenario

Specifically, we assume that the Transnistrian authorities liberalise trade with the European Union. Transnistria would abolish import duties on goods imported from the EU over a period of several years. We assume that the timetable of tariff reductions would follow the same schedule as established in the DCFTA between the Republic of Moldova and the European Union. The date when tariffs start to decline is assumed to be the 1st of January 2016.

Figure 3: Import duty revenues if import duties on EU imports are abolished



Source: Own calculations

Results

Figure 3 above shows the impact of this policy scenario on revenue from import duties. The bar on the left shows the duties that would be expected from goods imported from the EU into Transnistria with no tariff reduction. The three bars on the right show how tariff revenue evolves in the first three years of a reduction in tariff rates as stipulated in the DCFTA.

Our estimates suggest that revenue from duties on EU imports is expected to decline to USD 0.8 m in 2016 if Transnistria reduces tariff rates according to the same DCFTA schedule as Right-Bank Republic of Moldova.

Transnistria would face a loss of import duties of USD 12.4 m in the first year following the tariff rate reduction. This would mark a 94.4% decline in revenue compared to expected revenue without a tariff reduction. Thus Transnistria would lose almost its entire tariff revenue from EU imports in the first years after the adjustment.

The remaining USD 0.7 m in import duties on EU goods originates mostly from tariffs on agricultural goods, processed foods, and textiles, for which tariffs would be abolished over a longer period of time. Following the initial large decline in 2016, tariff revenue declines gradually to USD 0.4 m in 2018.

Conclusion

We estimate that Transnistria would face a USD 12.4 m reduction in revenue in 2016 should it reduce tariff rates on imports from the EU to the same extent and with the same speed as stipulated in the DCFTA. This represents the overwhelming share of Transnistria's import duties from the EU, which would have amounted to USD 13.1 m without any tariff reduction.

To put this into perspective, the decline is equivalent to roughly 4.3% of government revenues or 1.3% of GDP in 2016. Thus, the revenue shortfall represents a significant decline in revenues and means that authorities have to take measures to compensate for it.

3 Options for compensating the revenue shortfall

3.1 Initial remarks

As shown in Chapter 2, we expect a loss of import duties of USD 12.4 m in 2016 should Transnistria liberalise trade with the EU. In view of the difficult budgetary situation in Transnistria, abolition of import duties without appropriate countermeasures is not feasible; the revenue losses have to be compensated for or the budget deficit risks becoming utterly unsustainable.

So the question for authorities is how to compensate the expected revenue loss. Theoretically, the government could either reduce expenditures or increase revenue. However, a closer inspection of Transnistria's public finances shows a dangerous existing deficit of around 12.3% of GDP in 2014[5]. Amidst this discrepancy between revenue and expenditure a number of painful measures – such as a reduction in public sector wages – had to be introduced to reduce spending. Thus the potential for further cuts in public expenditure seems limited. Therefore, our analysis concentrates on measures to increase public revenue. Here two broad options will be considered:

- What are options to increase revenues from *existing sources,* and
- What are the options for introducing *new sources* of fiscal revenue?

Below, each of these options will be considered in turn.

3.2 Option 1: Extension of existing revenue sources

The most straight-forward approach for the government would be to make up for the lost revenue by increasing revenue earned from existing sources. As Table 2 below shows, total government revenue was USD 286 m in 2014, which means that the expected revenue loss is equivalent to 4% of government revenue earned in 2014.

The numbers suggest that the main source of income for the Transnistrian government is a gross all-stages turnover tax, which generated USD 69.1 m in 2014. Accounting for 24% of all revenue, the existing turnover tax would have to contribute the largest share of the required revenue increase if existing sources are to be extended.

[5] Actual net borrowing was around 7.2% of GDP in 2014 as part of the budget deficit could be financed through non-fiscal income including gratuitous transfers and income from entrepreneurial activity.

Table 2: Revenues by type of source for 2014

Revenue source	2014 USD m	Share of total revenues
Fiscal revenues	**229.3**	**80%**
Turnover tax	69.1	24%
Personal income tax	39.8	14%
Customs' duties	62.2	22%
Excises	37.0	13%
Other taxes	20.7	7%
Non-fiscal revenues	**56.8**	**20%**
Gratuitous transfers	2.4	1%
Incomes of special funds	29.4	10%
Revenues from entrepreneurial activity	19.1	7%
Other	5.9	2%
Total	**286.0**	**100%**

Source: Ministry of Finance PMR

Assessment of the gross all-stage turnover tax

However, a closer assessment shows that the turnover tax has a number of serious disadvantages. One of the problems is that the turnover tax is a gross tax, which is charged on turnover as opposed to profits. Even companies that are loss-making are liable to pay taxes. In order to at least take profitability partially into account, different sectors are charged different tax rates. However, this system is prone to lobbying, and tax rates have to be constantly updated to reflect changing market conditions.

Furthermore, a turnover tax distorts competition, as it favours large integrated companies. As the turnover tax is charged each time a good or service is sold, the final tax burden is heavily dependent on (a) the number of phases in the production process, and (b) the distribution of value added during individual production phases. Consequently, it favours large integrated companies that can source most inputs “in-house” and do not have to pay turnover tax. The existing gross all-stages turnover tax disadvantages small and medium sized companies that are burdened with the turnover tax every time they buy an input or sell their products on to other businesses.

Another negative side effect of the turnover tax is that, even using a single tax rate, similar products are liable for different total tax burdens depending on the number of stages involved in their production. This defies any notion of tax fairness and distorts competition.

Due to the significant deficiencies of the gross all-stages turnover tax, it has been abolished by many countries which formerly used it. The Russian Federation, for one, implemented a modern tax code on July 31, 1998, including a VAT, which nowadays is one of the most important revenue sources in the country's budget. As in Transnistria, Russia's actions were guided in part by trade liberalisation, in particular Russia’s WTO membership.

Conclusion viability of Option 1: Increase of existing taxes

Due to the many disadvantages of the turnover tax, we would argue strongly against an extension of the existing turnover tax as a means to compensate the revenue lost from the elimination of import duties. Indeed, increasing the turnover tax would have significant negative side effects, which would further reduce the competitiveness of companies in Transnistria.

3.3 Option 2: Tax reform and VAT introduction

As extending the inefficient and distorting turnover tax is not a desirable option, increasing revenue will require reforming the tax system in order to introduce new revenue sources. The most viable option for a new revenue source in this case is the introduction of a modern Value Added Tax (VAT), which could gradually replace the turnover tax.

There are a number of advantages to VAT introduction. The first is its revenue potential, as a VAT has a broad tax base similar to that of the gross turnover tax as it is also levied on each stage of production. This means – as our initial tax revenue estimate below suggests – that the VAT could easily generate significant revenue, even at low average and marginal tax rates.

Additionally, as a VAT only burdens the value added (turnover minus inputs), it avoids all the disadvantages of the turnover tax, in particular the distortion of competition in favour of large companies. Indeed, introducing a VAT and replacing the outdated turnover tax could act as a growth stimulus for small and medium sized enterprises in Transnistria.

Furthermore, a VAT has *de facto* the same effect as the import duties it would replace, since VAT is also charged on imports. Indeed, if the VAT rate were equal to the tariff rate, the only difference would be the name.

The VAT is also essentially a consumption tax. Companies get the VAT paid on their inputs refunded, and empirical evidence has shown that the tax burden from VAT is – to a large extent – carried by the final consumer. Thus a VAT would be a much smaller burden for Transnistrian companies.

Conclusion: Viability of Option, Tax reform and VAT introduction

To sum up, a modern VAT system promotes international trade, secures stable and sufficient revenue, enhances the growth potential of companies regardless of their size, and is in accordance with good governance. Thus, introducing VAT would bring Transnistria in line with accepted international standards.

To make a virtue of the necessity to compensate revenue lost from abolishing import duties, the Transnistrian government should carry out a long overdue reform of the tax system and introduce a VAT.

In the following chapter we provide an initial implementation plan for a VAT introduction.

4 Implementation plan for a VAT introduction

4.1 Two-stage approach to VAT introduction

In an ideal world, the Transnistrian authorities would plan, test, and implement a comprehensive tax reform that would result in VAT replacing the old ineffective gross turnover tax system. However, in order to maintain preferential access to the EU market, the country needs a workable solution to replace import duties by the beginning of 2016. Time is of the essence, and the Transnistrian authorities may not have sufficient time to carry out a full-fledged tax reform in one go. Taking into account these restrictions, we recommend a two-stage approach to carrying out a tax reform that will replace the existing turnover tax with an efficient VAT system.

Stage 1: Introduce and pilot VAT alongside the existing turnover tax

During the first stage of the tax reform, the Transnistrian authorities should consider a limited introduction of VAT at a low rate alongside the existing turnover tax. This would generate additional revenue while maintaining existing revenue. During this first phase, VAT could be introduced only for large companies. Such a small-scale roll-out would allow a much quicker introduction than might be possible for full-fledged tax reform. Consequently, the VAT could quickly generate revenue, which could be used to compensate the import duty shortfall resulting from Transnistria's trade liberalisation. At the same time, the government could gain valuable experience and make necessary adjustments before rolling out VAT for all companies.

Stage 2: Gradual extension of VAT and abolition of gross turnover tax

Once the tax administration and private companies are familiar with the new system, the second stage of the tax reform could begin. During this phase the revenue threshold for mandatory VAT declaration would be lowered to incorporate not only the largest companies but also medium-sized ones. Small companies could choose whether they want to charge VAT or not. Once a large share of companies is included in the VAT system, the gross turnover tax would be abolished and the VAT rate raised to a level that would allow its revenue to replace the revenue previously generated by the turnover tax. At the end of stage two, Transnistria would have introduced a VAT system in line with best international practices.

Since the introduction would happen in two stages, clear communication and strong government commitment will be essential, both before and during the entire period of VAT introduction. The government needs to make it clear that it is committed to introducing VAT, and that VAT will be extended to all companies and sectors of the economy.

The remainder of this section deals with implementation aspects, such as the initial tax rate, tax administration, and tax fraud, and provides recommendation for a pragmatic implementation in Transnistria.

4.2 Tax rate and tax revenue estimates

The main question for VAT implementation is which tax rate should be established. The VAT rate has to be chosen so that the VAT system generates the desired amount of revenue without overburdening consumers and companies and thus encouraging tax evasion.

For stage 1 of VAT implementation, the minimum requirement would be to cover at least the loss of import duties that would result from liberalising trade with the EU.

Tax base

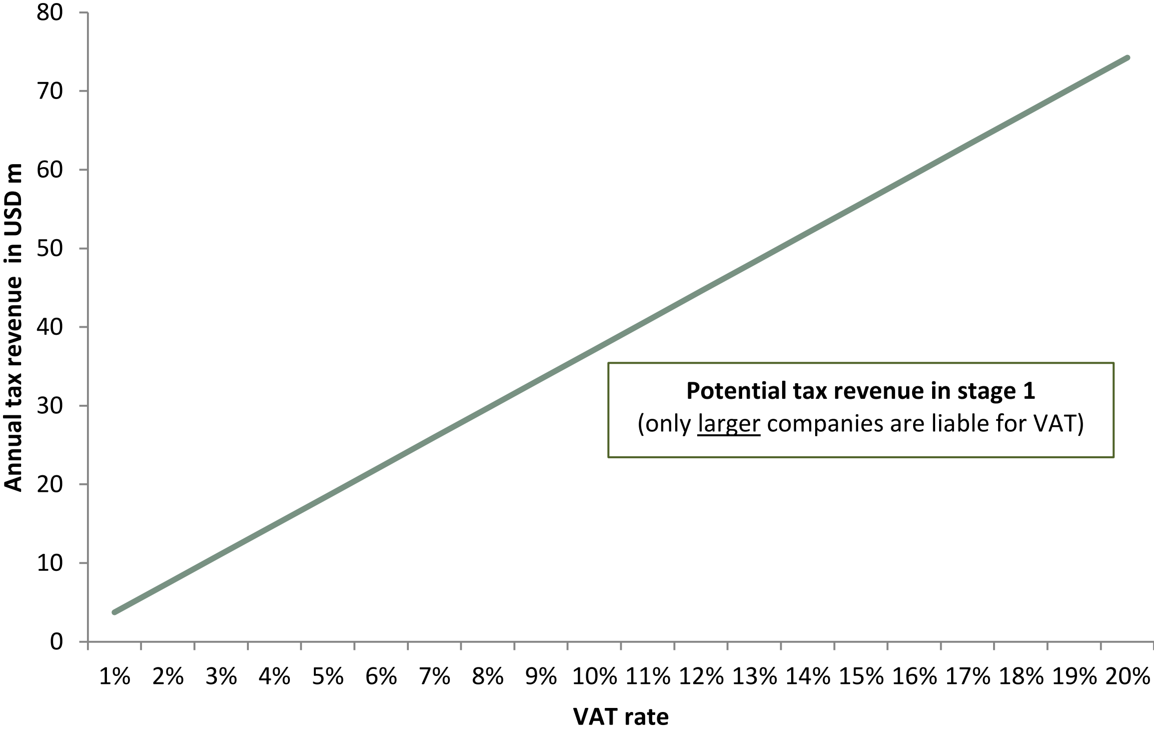
The revenue which can be generated from any given VAT rate depends on the available tax base. The less goods and services are exempted from VAT, the broader the tax base and the higher the revenue at any given rate. As such, the general recommendation is to grant as few exemptions as possible, especially as the mere notion that exemptions are possible invites lobbying from business and other interest groups. Additionally, the more exemptions exist, the more difficult VAT administration and compliance become.

As VAT is a consumption tax, companies will get the money for inputs, including investments, refunded. Thus the tax base for VAT is equal to GDP without investments. Based on our assumption concerning GDP growth, the resulting gross tax base in 2016 would be USD 825 m.

The government may consider exempting certain goods and services with broader social benefits (for example medical services) from VAT. Or it may wish to favour goods that are predominantly consumed by low income segments of the population. For our initial tax revenue estimate we have assumed that 10% of goods and services are exempted in a future VAT system.

In addition, we assume that during the first stage of Transnistria's VAT introduction only larger companies over a certain revenue threshold would be liable to declare VAT. The revenue threshold would have to be established based on economic and political discussion. As a conservative estimate, we assume that the companies over the revenue threshold account for about 50% of GDP. Based on those assumptions the tax base for VAT would be around USD 370 m during stage 1. Thus, VAT revenue for different VAT rate levels can be calculated. The chart below shows VAT revenue resulting from different VAT rates.

Figure 4: VAT revenue in 2016 for various rate levels with only larger companies liable to pay VAT[1)]



Source: Own calculations

[1)] *Note: Revenues during the stage 2 will be higher as the tax base would also include small and medium sized enterprises*

Result of the initial tax estimate

Our calculations suggest that in order to generate USD 12.4 m a general VAT rate of 3.4% would be required.

However, introducing and maintaining a VAT system requires considerable administrative resources. Thus there is little sense in going to the effort of introducing VAT for such a low VAT rate, which would only generate low revenue. If the decision for VAT introduction is made, a rate should be chosen that generates reasonable revenue in comparison to its administrative and compliance costs. Thus, there is a case for a higher VAT rate, one that could also help to consolidate budget deficit. Our suggestion would be to set the general VAT rate at 7% during the first stage of the VAT introduction. According to a rough estimate, such a rate would generate revenue of around USD 26 m in 2016.

Conclusion tax rate and tax revenues estimates

During the first stage of VAT introduction, the Transnistrian government should set the general VAT rate at 7%. With expected revenue of USD 26 m in 2016, this VAT rate would provide sufficient income to cover the losses from liberalising trade with the EU, and provide additional, much-needed revenue to reduce the budget deficit.

4.3 Required time frame for tax reform

Which time frame is realistic for VAT introduction? Personal experience of the authors of this study suggests that the time required depends on a number of factors, such as the political system, capacity of the administration, and the level of outside support. As with any reform, an *ad hoc* time frame can only be indicative.

International experience with tax reform and VAT introduction

The experience of other countries that undertook tax reforms, in particular VAT introduction, can provide some indication of the time requirements and factors which influence the speed of tax reform.

In Croatia a *totally new tax system*, also including Corporate Income Tax (CIT) and Personal Income Tax (PIT), was implemented in about *three to four years,* finishing in 1997. It is worth mentioning that this took place partly under very difficult circumstances during the Balkan war.

In Bosnia and Herzegovina the *entire tax system* was reformed from 2001 to 2005. The discussion of reforming direct taxation (e.g. CIT and PIT) lasted for more than three years. However, VAT was introduced in a much shorter period of about *18 months*. In Bosnia and Herzegovina complex governance structures (specifically, the tripartite organisation of ministries) have made discussions very difficult and time consuming; however, the implementation of the VAT on the state level was supported by international experts, who helped to speed up the reform.

Another fundamental tax reform took place in the smallest European country, Liechtenstein (about 37,000 inhabitants), in 2010. However, the actual reform was preceded by a very long public discussion and a preparation phase of about eight years. This is due to the fact that Liechtenstein is a direct democracy with complicated legislative procedures. Once the necessary decisions were taken, the official tax reform commission needed about *30 months* for the final implementation in 2010.

These international examples, which often included comprehensive tax reform as opposed to VAT introduction on its own, suggest that a full VAT introduction can take up to 18 months.

Our assessment of time requirements in Transnistria

To recap, in the case of Transnistria we would suggest a two-stage approach for the VAT introduction. During the first phase, VAT would be introduced for a limited number of companies with a low rate alongside the existing turnover tax. By using existing software solutions and making use of international assistance this would considerably reduce the implementation time needed. We predict that with the right support – a VAT task force consisting of international experts – stage 1 of the VAT introduction could be realised within a time frame of 6-9 months. However, this requires clear commitment from all political stakeholders.

A full VAT implementation (as envisioned in stage two of our concept) which would replace the existing turnover tax would realistically take about *18 months,* including the six months required for stage one.

4.4 Creating an efficient tax administration to reduce tax evasion

Tax evasion and tax refund fraud are among the reasons why a previous VAT system was abolished in Transnistria at the beginning of the decade. To avoid a repeat of the country's past experiences, VAT introduction needs to be accompanied by an efficient tax administration. Indeed, tax law is always enforced by an efficient fiscal administration.

This is important, as tax evasion can become a vicious cycle. The more tax evasion takes place, the stronger the sentiment that the existing tax system is unfair and tax compliance does not pay. If such sentiment prevails, tax-evasive activities and undocumented economic activity increase in turn, encouraging more tax evasion. Therefore, within single tax laws or the general rules of an all-encompassing tax code, administrative countermeasures have to be implemented to safeguard the tax basis and state revenue. This is the main role of the tax administration.

Below we outline some of the most common issues with tax evasion and how to address them within an efficient tax administration.

Pre-tax deduction and VAT refund fraud

The most common VAT problem is usually caused by pre-tax deductions, which even today in many countries and customs unions (including the European Union) still set incentives for criminal activities. Thus tax refund fraud must be high on the political agenda. Specifically, in paper-based, steered fiscal administrations, time-lags that can be exploited by criminal actions are inevitable. Dummy companies can be established with the sole purpose of exchanging tax invoices, which are then used to get tax refunds. By the time the tax offices have a chance to discover the fraud, the firms are already closed down and the bank accounts cancelled. At the same time, in customs unions so-called carousel deals (in English: missing trader intra-community fraud, or MTIC) are being carried out across the borders to get back export tax refunds, again without any delivery of goods and services. This tax refund fraud is a persistent threat, and necessitates specific countermeasures.

Counter measure 1: Rapid tax collection and refund

One important countermeasure is rapid tax collection. In Germany, for example, only SMEs below some specific turn-over limits have the right to complete the VAT tax form only once a year (with only one tax payment or refund for the whole year). Firms with higher turn-overs have to go through that procedure every quarter. What's more, for turn-over beyond both limits, VAT declarations have to be completed every month – meaning there is a time-lag of just a month, with a few days more for tax refunds. This leaves very little time for fraudulent activities.

Counter measure 2: Electronic tax declaration

In a world of (almost) paper-free practices, delays can be substantially reduced and tax compliance improved by using electronic tax declarations. Since those systems have already been in place in other countries for several years, Transnistria would have the advantage of installing a proven system. The most important prerequisite is a functioning IT system with modern hardware and efficient software. Nowadays all large multinational software companies (e.g., Oracle, SAP, IBM) have comprehensive IT solutions for central, state, and local jurisdictions – Oracle, for example, is used in Bosnia and Herzegovina, and was implemented there in 2003/2004.[6]

However, this does not mean that the implementation of a VAT system and the simultaneous creation of an IT platform are not significant challenges for the tax administration. Indeed, alongside the chosen IT platform, draft laws, decrees, and guidelines have to be discussed and formulated. For the tax administration, detailed handbooks with case studies have to be completed, which can also be used for the training of aspiring tax and accounting professionals. For companies and taxpayers, information booklets and flyers have to be prepared in order to carry out a public information campaign. It is important that the Transnistrian authorities can draw on international expertise for all those tasks.

Counter measure 3: Strictly non-cash payments

Another prerequisite for efficient VAT administration and a potent counter-measure against tax fraud is the existence of an efficient banking system. Indeed, the best protection against tax refund fraud is to combine a well-functioning IT solution for VAT declaration with non-cash payment of VAT via individual bank accounts.

Specifically, we recommend that the tax code mandate that all (compulsory or voluntarily) VAT-registered firms have to establish qualified bank accounts at authorised banks. This bank account has to be registered with the tax administration, and in cases of reasonable suspicion also controlled by the fiscal authorities. All transactions relevant for VAT purposes have to be done via those qualified bank accounts. Only through control of the bank accounts does the fiscal administration have clear and area-wide control of all the tax relevant turn-over processes that take place in the country. Such a complete chain of evidence makes tax evasion and corruption very difficult. What's more, the tax administration gets benchmarks for specific sectors and company types, which would enable them to detect suspicious behaviour.

If additionally not only the net turn-over, the VAT yield and the deductible pre-tax are to be completed in the tax forms but also all incoming and outgoing invoices are electronically transferred, the tax administration has almost full information; based on this information and specific screening software, questionable actions can be detected and controlled. Additionally, a crosscheck of tax invoices for tax refunds can be done almost automatically, presuming that a standard format for tax invoices is developed as in many other countries.

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[6] See www.oracle.com, especially The Oracle Public Sector Management System (PSRM), developed for core tax processing; see INTRASOFT INTERNATIONAL, http://www.oracle.com/us/industries/public-sector/public-sector-revenue-management-br-076901.pdf.

Counter measure 4: Special short notice VAT audits

In addition to the measures mentioned above, tax compliance can be supported by special VAT audits in the office of the taxpayer if suspicion of fraud or abnormal declaration exists. Making sure those special audits can be conducted very quickly with short notice increases the incentives for compliance.

Conclusion for VAT introduction in Transnistria

An efficient tax administration is a pre-requisite for both the success of the VAT introduction and the prevention of fraudulent activity. To ensure this, a highly developed IT system with simple software solutions is needed. Here Transnistria should make use of systems that have proven their worth in other countries. The roll-out needs to be accompanied by dedicated training for the tax administration, along with training manuals and information materials for companies and consumers. If the IT administration is combined with non-cash payments, tax compliance is likely to increase gradually, which will create positive revenue dynamics for the whole tax system – not only VAT. Indeed, a modern VAT system with pre-tax deductions and non-cash payments reduces shadow activities, and thus increases the officially measured GDP, strengthening the tax basis of other existing taxes as well.

In order to ensure an efficient VAT administration based on international best practices, the Transnistrian authorities should seek the support of international partners.

Annex 1 – Assumption for key economic variables

Indicator	GDP nom.	GDP real	GDP nom.	GDP real	Inflation index	Investment nom.	Investment nom.	Investment real	Investment ratio	Exchange rate
Unit	USD m, current	USD m, 2014 prices	TNR m, current	TNR m, 2014 prices	2014=100	USD m, current	TNR m, current	TNR m, 2014 prices		TNR/USD
2014	1,116.8	1,116.8	12,396.3	12,396.3	100.0	171.1	1,899	1,899.0	15.3%	11.1
2015	987.1	922.6	12,600.8	11,776.5	107.0	144.3	1,842	1,709.1	14.6%	12.8
2016	962.5	856.7	12,900.1	11,482.1	112.4	137.4	1,842	1,623.6	14.3%	13.4

Source: Own assumptions based on PMR Office for Statistics, Ministry of Economy, Transnistrian Republican Bank

Annex 2 – Calculation of the VAT tax base for stage 1

Table 3 - Estimated tax base in 2016 for stage 1 of VAT introduction

Indicator	TNR m	USD m
GDP (nominal)	12,900.1	962.5
Investments (nominal)	1,842.0	137.4
Gross tax base	*11,058.1*	*825.0*
Share exempted goods and services	10%	10%
Share of revenues from companies below minimum VAT threshold	50%	50%
Net tax base for stage 1	**4,976.1**	**371.3**

Source: Own calculations

Annex 3 – VAT rate levels and VAT revenues during stage 1

Table 4 - VAT rate and corresponding VAT revenue

VAT rate	Revenue generated, USD m	Revenue generated, TNR m
1%	3.7	49.8
2%	7.4	99.5
3%	11.1	149.3
4%	14.9	199.0
5%	18.6	248.8
6%	22.3	298.6
7%	26.0	348.3
8%	29.7	398.1
9%	33.4	447.9
10%	37.1	497.6
11%	40.8	547.4
12%	44.6	597.1
13%	48.3	646.9
14%	52.0	696.7
15%	55.7	746.4
16%	59.4	796.2
17%	63.1	845.9
18%	66.8	895.7
19%	70.5	945.5
20%	74.3	995.2

Source: Own calculations