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WAS THE NEGATIVE IMPACT OF EU ACCESSION ON VAT REVENUE ONLY SHORT-TERM? THE CASE OF SLOVENIA

Ali je bil negativni učinek vstopa v EU na prihodke od DDV le kratkoročen? Primer Slovenije

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Abstract

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Slovenia joined the EU on May 1, 2004. Some of the effects of its accession were expected and predicted in advance. Nevertheless, in some segments, considerable deviations occurred. Revenues from VAT are one such example. We started investigating the reasons behind the unexpected loss of revenue from VAT in the beginning of 2005. We were analysing past movements of VAT payments and refunds and trying to predict the dynamism and scope of VAT revenue in 2005 and 2006. We compared the data about the actual realisation of VAT revenues in 2005 with our estimates. Thus, we could examine how accurate our estimates were, and try to find the answer to the question of whether a huge unexpected loss of VAT revenues in 2004 was only a short-term and one-off phenomenon or if smaller revenues can also be expected in future tax periods.

Key words: European Union, value added tax, Slovenian budget, budget liquidity

Izvleček

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Slovenija se je 1. maja 2004 priključila EU. Nekatere posledice vstopa so bile sicer predvidene in vnaprej ocenjene, vendar je pri nekaterih segmentih precejšen odmik od pričakovanega. Takšen primer predstavljajo prihodki od davka na dodano vrednost (DDV). Vzroke za nepričakovan izpad prihodkov od DDV smo začeli proučevati v raziskavi, izvedeni v začetku leta 2005. Analizirali smo pretekla gibanja vplačil in vračil DDV ter skušali napovedati, kakšna bosta dinamika in obseg prihodkov od DDV v letu 2005 in 2006. Podatke o dejanski realizaciji prihodkov od DDV v letu 2005 smo primerjali z našimi napovedmi, preverili njihovo točnost in odgovorili na vprašanje, ali je bil nepričakovano velik izpad prihodkov od DDV v letu 2004 le enkratni pojav in ali pa je mogoče manjše prihodke pričakovati tudi v prihodnosti.

Ključne besede: Evropska unija, davek na dodano vrednost, slovenski proračun, likvidnost proračuna

JEL: E62, H27, H61, H71

Introduction

Taking into account the fact that VAT represents more than one third of budget revenue in Slovenia, it is clear that it has a substantial influence both on budget liquidity[1] and its execution. It was known before Slovenia joined the EU that problems related to the managing of budget liquidity might appear due to the transformation of some imports into an intra-Community supply of goods and services. Liquidity problems related to VAT appeared on May 1, 2004, when customs services were abolished, which, until then, had carried out customs control and issued input VAT invoices. A gradual increase of the liquidity gap began in June 2004, because VAT on goods imported in April was paid in May. In the Amendment to the Budget of the Republic of Slovenia for the Year 2004, the estimated loss of income from VAT because of the accession to the EU amounted to SIT 13 billion (EUR 54 million)[2].

Shortly after the accession of Slovenia to the EU, it became clear that the loss of income from VAT would be slightly bigger than initially estimated. Since this loss caused substantial difficulties in managing budget liquidity, this paper starts with a presentation of the causes behind such a situation. Further on, we will try to find out if this was merely a short-term, or one-off, phenomenon or if reduced revenue from this source can also be expected in the future. First, let us have a look at the systemic VAT-related changes, which were caused by Slovenia's accession to the EU.

1 Systemic VAT-related changes after accession to the EU

On May 1, 2004, the new member states, including Slovenia, became a part of the customs and tax territory of the EU, where the free movement of goods and services is ensured. Taking into account the fact that there is no frontier control in the unified customs territory over the movement of goods between member states, which would require that customs authorities in individual member states charge VAT on import and issue export documents for goods exempted from VAT[3], an

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1 Budget liquidity means that the government is able to fully fund all its payment obligations in time. The State Treasury manage the liquidity of the budget by liquidity borrowing from banks or depositing extra funds into banks. Liquidity borrowing shall mean drawing short-term loans and/or issuing short term securities to finance temporary deficits in government cash balances resulting from unbalanced movements in receipts and cash outlays of the budget. Short-term is defined as a period less than one year, where the principal and interest are fully repaid in less than one calendar year. The term budget liquidity is also used in the continuation of this paper and has the same meaning as explained here.

2 In order to convert tolars into euros we used the average monthly and annual foreign currency exchange rates of the Bank of Slovenia.

3 Exemption from export VAT means that the zero-rate is applied. There is a special term used for such treatment of taxable goods in international trade, namely border tax adjustment, which means that goods enter a member state untaxed, and the taxes are later (at the time of export or when being sold) charged according to the applicable tax rate in the importing member state.

obligation to charge VAT on goods traded between the member states of the EU was transferred to taxable persons in an individual tax sovereign country. In this case, the system of fiscal treatment for goods is called *the destination-based VAT system* or *the destination principle* (Stanovnik 2002; Ošlaj 2004).

It should be pointed out that the destination-based VAT system is used only for transactions between taxable persons. Purchases made in any country in the Union by persons who are not taxable persons (private persons), are subject to taxation according to *the origin based VAT system* or *origin principle*, i.e. according to the regulation of the country, where the purchase was made. This rule does not apply for purchases of new means of transport (cars, yachts, etc.), which are subject to taxation according to the principle of destination (Stanovnik 2002; Ošlaj 2004).

Once a country becomes a member of the EU, control over the trade of goods and services of taxable persons, and VAT payments among taxable persons in different states, is transferred from customs authorities[4] to tax authorities[5]. Such trade becomes domestic trade and is thus subject to internal VAT treatment. Tax authorities in individual countries are connected through a computer system for the exchange of data on taxable persons in the EU called VIES (VAT Information Exchange System), within which the obligations of taxable persons are controlled. A special system of identification[6] and monitoring of the flow of intra-Community trade was introduced. In addition, VAT reports are also unified within the EU. Taxable persons are liable to calculate input and output VAT in monthly, tri-monthly or semi-annual VAT statements, prepare three-monthly reports on deliveries to taxable persons in other EU states, whereas those taxable persons with annual turnover exceeding EUR 100,000 are also liable to prepare monthly reports for Intrastat.

a) Taxation of goods according to the place of transaction

Harmonised VAT legislation within the EU territory[7] ensures that this tax in all member states is paid more or less according to the same principle, the most important issue being that VAT for the same supply is paid only once, i.e. in one member state only. Because of that, taxation procedures in member states should be carried out according to the broadly based taxation regulations for goods and services supplied between taxable persons within the EU. Rules regarding the supply of goods are shown in Figure 1. Below, we explain some basic terms used for trade among the EU member states.

Domestic supplies

A Slovenian seller charges its customer Slovenian VAT and pays it to the national budget, which means that, like before, the place of transaction is Slovenia, which receives the tax; this is the seller's output VAT.

Domestic acquisitions

The Slovenian customer gets the goods, together with the invoice with the charged VAT. This is its input VAT, which can be, similarly as before, deducted under certain conditions.

Import of goods from third countries

In the same manner as before accession to the EU, the customs authorities charge the buyer or importer in Slovenia with the Slovenian VAT. It is necessary to point out that, at present, imported goods are also entering the EU (not only Slovenia). In this case the place of import is in the importing country. The importer can deduct input VAT, charged by the customs authorities. If the goods are supplied further to another EU country, the import in Slovenia can be exempt from VAT, and the taxation is carried out in the EU country of destination.

Exports of goods to third countries

A Slovenian exporter is exempt from paying VAT, which means that for goods leaving Slovenia a zero tax rate is applied. The goods cross the customs frontier and the tax is paid in the importing country according to local regulations. To put it differently, in the same way as before, the place of transaction is Slovenia, and for exports no VAT is charged. Imports are taxable in the third country (for instance in Croatia).

Acquisition of goods from EU member states

A Slovenian customer calculates themselves the amount of Slovenian VAT that is due, and pays it to the national budget (until May 1, 2004 this was considered as imports to Slovenia). Supplies of goods from one EU member state to another are exempted from VAT in the first state.

Goods supplied to EU member states

The Slovenian seller is exempted from paying VAT on goods supplied. The buyer in the EU member state pays VAT according to the regulations in their country for intra-Community acquisitions (until May 1, 2004 this was considered as exports from Slovenia).

If we summarise the findings made so far, after May 1, 2004 the following has remained unchanged in the field of VAT:

- VAT is charged for goods according to the destination principle, i.e. in the state where the goods are consumed;

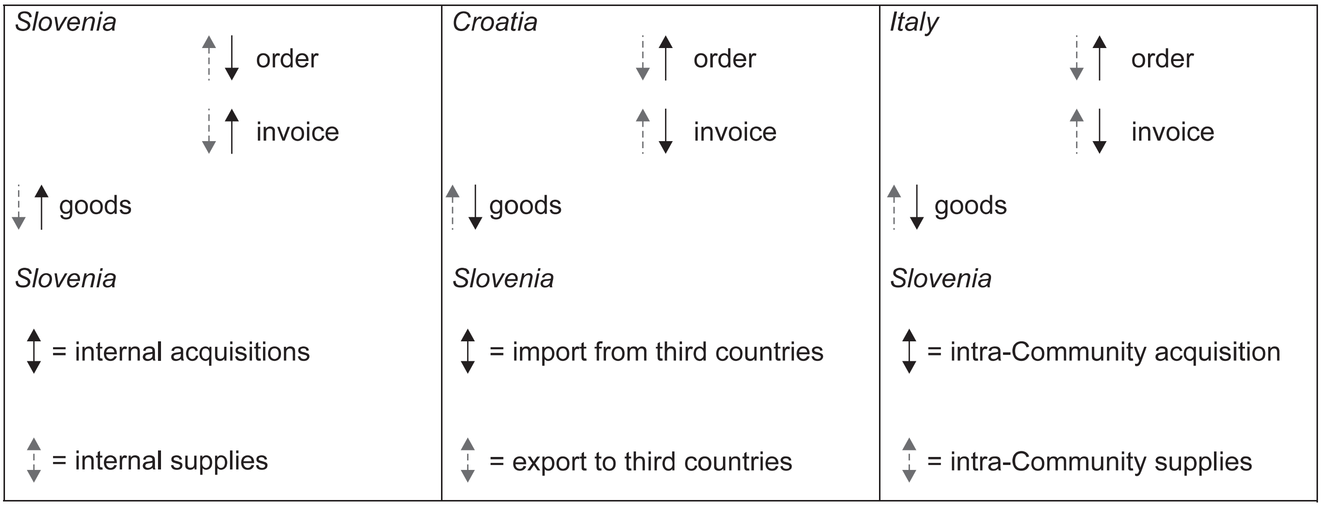
4 In Slovenia: the Customs Administration of the Republic of Slovenia (CARS). VAT on imported goods and services is under the jurisdiction of CARS.

5 In Slovenia: the Tax Administration of the Republic of Slovenia (TARS). TARS monitors, plans and collects VAT.

6 Tax authorities in individual EU member states give a VAT identification number, which is crucial for the exemption of VAT in intra-Community supplies and for the right to deduct the input VAT, to taxable persons and non-taxable legal persons.

7 In the EU, the Sixth Council Directive on the Harmonization of the Laws of the member states relating to Turnover Taxes – A Common System of Value Added Tax (1977) is the basic legal document regarding the indirect taxation of goods and services. The Directive has a binding nature, but it was left to individual member states to decide how they would lay down the obligations of the Directive in their national legislation. The Slovenian Value Added Tax Act is entirely harmonized with this Directive.

Figure 1: *Taxation rules for the trade of goods in the EU*



Source: Ošlaj (2004).

- VAT for services is charged according to the origin principle, i.e. VAT is paid in the state, where the taxable person selling the services belongs (with some exceptions that will be discussed below);
- A taxable person pays the VAT on value added, which means that the input VAT, which has been charged by the taxable person to the buyer, is deducted from the output VAT, which has been charged to the taxable person by suppliers. The end buyer pays the same VAT as before the country's accession to the EU;
- A vendor who sells goods and services, which qualify as exempt from VAT[8], is not entitled to deduct the input VAT (fake exemption), with the exception of exported goods, which are exempt from VAT. Nevertheless, the exporter has the right to seek a deduction from VAT (real exemption);
- VAT is charged for importing goods from third countries, which are not EU members, while exports to these countries are exempted from VAT.

b) Taxation of services according to the place of transaction

The basic taxation principle for the supply of services remains the taxation system according to *the origin principle*, which means that VAT on services is paid in the country, where the head office of the taxable person (the seller of the service) is situated or at his/her permanent place of residence. The Value Added Tax Act allows for numerous exceptions for certain services[9], where the place of transaction is determined according to other conditions, as for instance according to the actual place of supplied service, head office of the recipient of the service, etc.

2 Theoretical case of charging VAT before and after May 1, 2004

In order to improve our understanding of VAT-related issues, let us present a hypothetical VAT form for the settlement of value added tax for April, submitted by a fictitious taxable person (an invented Slovenian company) until May 31 (see Example 1). The calculation is based on the following conditions:

- The company only carries out taxable activities (production); some of its products are exported to Austria, Italy and to Croatia (the hypothetical values of its sales are shown in the table bellow);
- Raw materials and intermediate goods are purchased in Slovenia, Italy, Austria and Croatia (hypothetical values are given in the table below);
- Raw materials, intermediate goods and final products are taxed in accordance with the standard rate, i.e. 20 %;
- All company's partners are registered for VAT in their countries;
- For the sake of simplification, only one consignment of goods from/to each country is shown;
- The company has a permit from CARS to pay all taxes calculated by the customs authority for the current month until the 15th of the month following the month during which the chargeable event occurs.

As can be seen from the VAT calculation below, before Slovenia entered the EU, the tax liability of this company amounted to -200 currency units (c.u.)[10]. Due to the surplus of input VAT over output VAT, the taxable person did not pay any money to the national budget. On the contrary, he received a refund of 200 c.u. As the statutory deadline for VAT refunds is 60 (or 30) days after the VAT calculation has

[8] Exemptions for certain activities in the public interest: hospital and medical care, services and goods linked to welfare and social security, children's or young people's education, school or university education, vocational training, activities of Slovenian public radio and television, etc. Other VAT exemptions: insurance and reinsurance transactions, letting or leasing of immovable property, supplies of gold to the Bank of Slovenia, etc. (Value Added Tax Act, 2004, Articles 26-27).

[9] Services connected with immovable property, transport services, services in the field of culture, arts, science, education, sports, etc.

[10] Tax liability equals the difference between output and input VAT.

Example 1: *A hypothetical VAT calculation before and after May 1, 2004*

acquisitions		*supplies*	
acquisitions of goods in Slovenia	1,000	supplies in Slovenia	2,000
other acquisitions in Slovenia	500		
acquisitions of goods in Austria	700	supplies to Austria	1,000
acquisitions of goods in Italy	500	supplies to Italy	700
acquisitions of goods in Croatia	300	supplies to Croatia	1,500
total	*3,000*	total	5,200

event	*before May 1, 2004*	*after May 1, 2004*
import from Austria; April 5	140	-
import from Italy; April 25	100	-
import from Croatia; April 20	60	60
VAT payment to the budget on May 15	300	60
difference	*-240*	

input VAT			
before May 1, 2004		*after May 1, 2004*	
acquisitions in Slovenia	300	acquisitions in Slovenia	300
imports	300	imports	60
		acquisitions in other EU member states	240
total	*600*	*total*	*600*
Difference	*0*		

output VAT			
before May 1, 2004		*after May 1, 2004*	
sales in Slovenia	400	sales in Slovenia	400
exports to Italy	-	sales to other EU member states	-
exports to Austria	-	self-billing of VAT on acquisitions from EU member states	240
exports to Croatia	-	exports to Croatia	-
total	*400*	*total*	*640*
Difference	*240*		

Source: Kirbiš (2005).

been submitted[11], in our case July 31, the budget received, during the period between May 15 and July 30, the amount of 200 c.u. The taxable person has therefore paid 100 c.u. to the national budget[12].

After May 1, the tax liability of our company amounts to +40 c.u. As the output VAT exceeds the input VAT, the money will not be refunded. On the contrary, the company will have to pay an additional 40 c.u.[13] to the national budget, in our case until May 31[14]. In the new taxation system, the final tax liability of the taxable person will also amount to 100 c.u.[15].

This extremely simplified example shows that, under the specified conditions, with regard to budget liquidity management, the only difference between the former and present system lies in the fact that beforehand, the VAT was available for the state budget for approximately one or two months (VAT was paid by importers to the CARS at the time of import and was refunded to the taxable persons after this period), whereas now companies have the money at their disposal approximately one month before they pay the money to the budget. In other words, this means that after EU accession, VAT is calculated and paid for the past, whereas before VAT on imports was paid in advance. It can thus be stated that the new VAT system is less favourable for the liquidity of the national budget and more in favour of taxable persons who make purchases in the EU, as they include in their tax calculations for purchases within the EU both input and output VAT. Consequently, there is no inflow to the state budget and, at the same time, claims for refunds on paid VAT on imports are reduced for the same amount. However, there is no money flow.

11 Article 53 of the Value Added Tax Act (2004) stipulates that the deadline for the refund of the tax difference between input and output VAT to the exporter should be 30 days after the VAT calculation has been submitted, whereas the deadline for the refund of input VAT to other taxable persons should not exceed 60 days after the VAT calculation has been submitted.

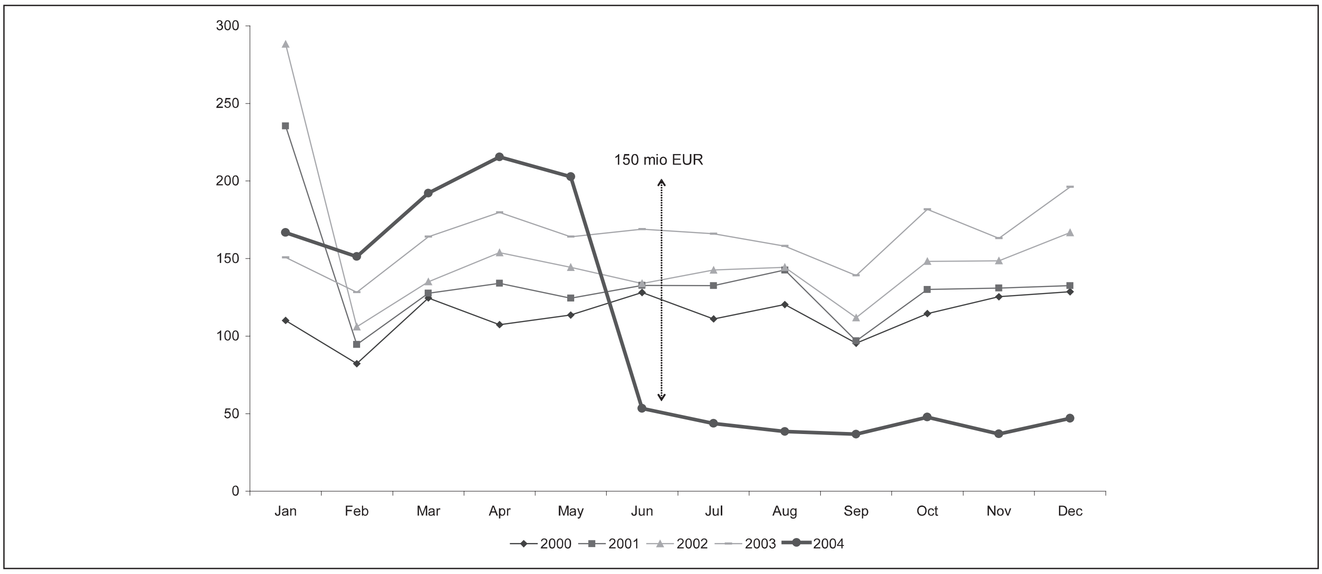
12 The sum of payments of the import VAT (300 c.u.) plus refunds of the surplus of the input VAT over the output VAT (-200 c.u.).

13 If the input VAT exceeded the output VAT, the company would make a claim to the state, which would, on principle, be included in the VAT settlement for the next period or would demand a refund of VAT, which would be made by the state within 30 or 60 days (see note 11).

14 Articles 38 and 39 of the Value Added Tax Act (2004) stipulate that a taxable person should submit the VAT calculation to the competent tax authority. The taxable person shall state the tax liability calculated and shall pay VAT by the last working day of the month following the expiry of the tax period.

15 The total paid VAT on imports (60 c.u.) and paid excess of output over input VAT (40 c.u.).

Figure 2: *Payments of VAT on imports in the period between 2000 and 2004 (in millions of euros)*



Data Source: Ministry of Finance.

3 The effect of systemic VAT changes on the liquidity of the national budget

In the previous chapters, it was found that the systemic VAT changes after May 1, 2004 influenced mainly the liquidity of the national budget, as they resulted in lower revenue from VAT on imports, which was later partly compensated by increased VAT gross payments and lower VAT refunds.

In this chapter, we will analyse in detail the past trends of VAT payments and refunds (for the period 2000-2004). We will also present our forecasts about the dynamism and scope of VAT revenue[16] for the tax periods 2005 and 2006. Since we already have the data about the actual realization of VAT revenue in 2005, we will also compare this data with our estimates.

a) Payments of VAT on imports

Payments of VAT on the import of goods and services were more or less consistent through the whole period between January 2000 and May 2004. In June 2004, the effect of entering the EU was shown for the first time, as payments from the VAT on imports became substantially lower, specifically: EUR 150 million lower than in May. However, in the past years, they used to be slightly higher in June than in May (Figure 2).

The VAT payments on imports are usually the highest in April, October and December due to increased imports during these months, or during the previous month (see VAT payment deadlines stated below).

The VAT payments on imports are made on every working day of the month. It can, however, be noticed that the majority of payments are made on the 15th or 16th day of a month, and on Mondays and, even more often, on Fridays. Such dynamism is in accordance with Article 63 of the Act Implementing Customs Regulations of the European Union (2004), which stipulates that the normal deadline for tax payments is 10 days from the date of receipt of customs declaration, with two exemptions to that rule, which allow for a deferment of payment, namely:

- by monthly submissions of customs declarations, the deadline is the 16th day of the month following this calendar month;
- by weekly submissions of customs declarations the deadline for VAT payment is Friday of the fourth week following this calendar week.

Forecasts are based on the ARIMA model, determined by the Tramo/Seats method, because seasonal components and extreme values[17] are present in import VAT payments and also in VAT gross payments and VAT refunds (due to the prolongation of the fiscal year - in 2002 for the last time, due to the accession to the EU and because of the amendments of the Value Added Tax Act - see Appendix 3).

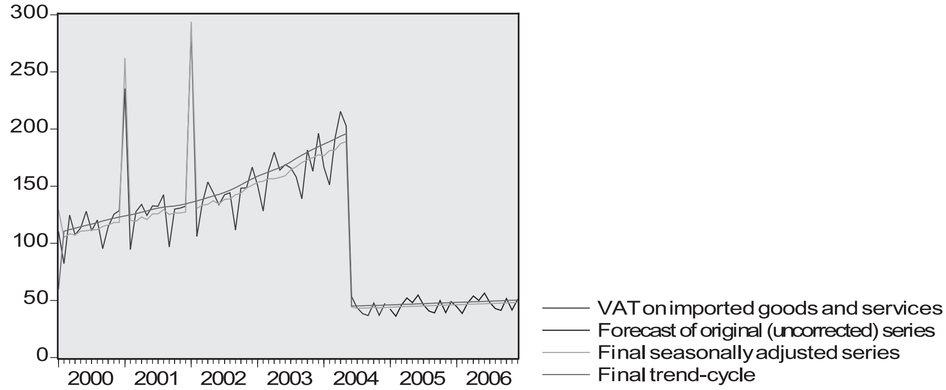
On the basis of the regression function (Figure 3 and Appendix 1a) we estimate that the monthly revenue from import VAT in the period between 2000 and 2004 increased on average by EUR 1.7 million. The accession to the EU, the effects of which are visible in June 2004, caused a decrease in these payments amounting to EUR 146 million. Because of the prolongation of the fiscal year, payments in January 2000-2002 were on average higher by EUR 113 million.

We estimated that between 2005 and 2006, the revenue from VAT on imported goods and services would vary between EUR 36 to 56 million. For both years, the minimum revenue was estimated for February (2005: EUR 36 million; 2006: EUR 39 million) and the maximum revenue for June (2005: EUR 55 million; 2006: EUR 56 million).

[16] Total VAT revenue = VAT payments on imports + VAT gross payments – VAT refunds.

[17] January 2000, 2001 and 2002 and June, July, August and November 2004 are treated as outliers.

Figure 3: *Payments of import VAT and their forecasts for the period between 2000 and 2006 (in millions of euros)*



Data Source: Ministry of Finance and own calculations.

In fact, in 2005, monthly revenue from VAT on imports was on average EUR 2.5 million lower than estimated. However, the revenue was — as expected — the lowest in February (EUR 30 million) and the highest in December (EUR 58 million) (see Appendix 2).

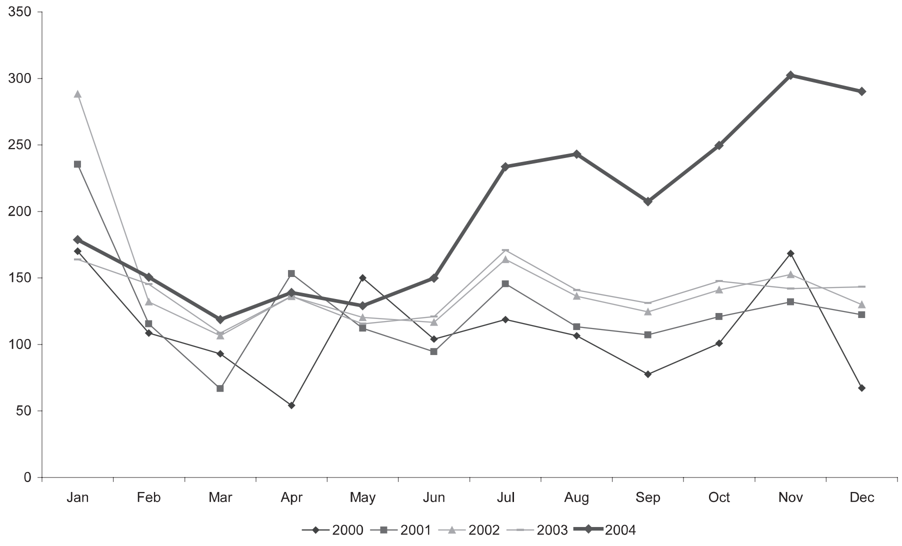
b) VAT gross payments

Trends of VAT gross payments in different years are rather similar, with payments being usually the highest in April, July and October. The only exception is the year 2000 and the period after EU accession (Figure 4). In 2000, the last day of the month was, in most cases, not a working day (in April, October and December), thus 50 % of VAT gross payments were carried out on the first working day of the subsequent month (Voje 2001), which is consistent with paragraph 101 of the General Administrative Procedure Act (1999). In all other years, no such delays occurred, except in March 2001, when half of taxes due were paid in the subsequent month (on April 2).

After EU accession, VAT gross payments started to increase substantially, which was mainly due to the transformation of a part of imports into intra-Community supply (the effect was seen for the first time in July) and amendments of the Value Added Tax Act (the effect was seen in November, when the growth of VAT gross payments reached its peak – they were higher by 116 % compared to the previous year).

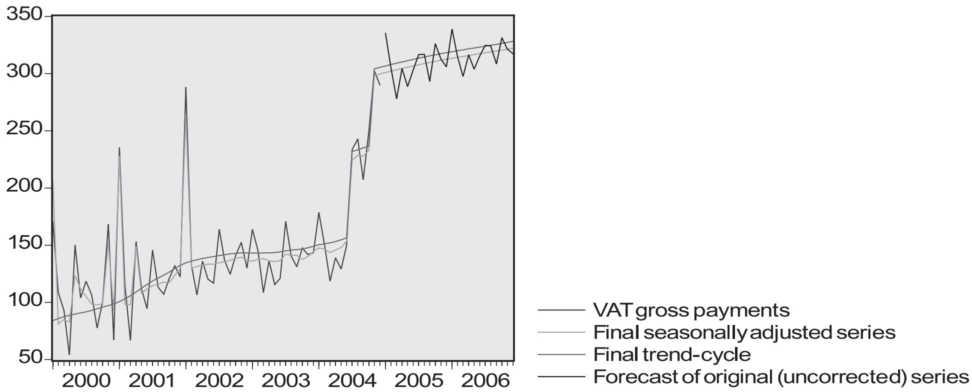
The estimated value of the regression function shows that monthly VAT gross payments in the period between 2000 and 2004 increased by on average EUR 1.1 million. Due EU accession, which was reflected in July 2004, these payments increased by EUR 72 million, while due to the amendments of the Value Added Tax Act, which was reflected in November 2004, they increased by EUR 67 million. In addition, due to the prolongation of the fiscal year, VAT gross payments were on average higher by EUR 123 million in January 2000–2002 than before (Figure 5 and Appendix 1b).

Figure 4: *VAT gross payments in the period between 2000 and 2004 (in million euros)*



Data Source: Ministry of Finance.

Figure 5: *VAT gross payments and their forecasts for the period between 2000 and 2006 (in millions of euros)*



Data Source: Ministry of Finance and own calculations.

According to our forecasts, VAT gross payments in the period 2005–2006 should have reached from between EUR 278 and 338 million. For both years, the minimum gross payments were estimated for March (2005: EUR 278 million; 2006: EUR 297 million) and the maximum gross payments for January (2005: EUR 335 million; 2006: EUR 338 million).

However, in 2005, monthly VAT gross payments were on average EUR 138 million lower than estimated. As expected, they were the lowest in March (EUR 96 million) and the highest in January (EUR 222 million) (see Appendix 2).

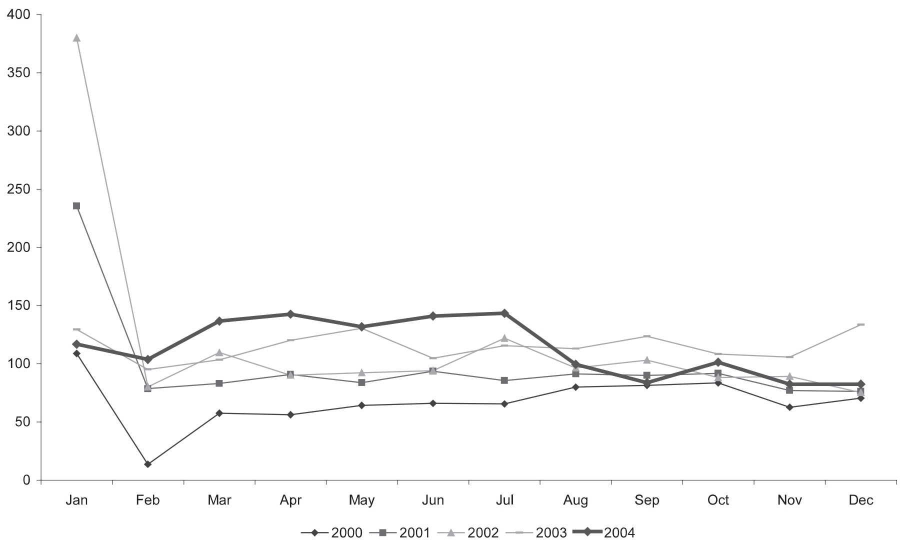
c) *VAT refunds*

The trend of VAT refunds in the observed period is without substantial fluctuations (Figure 6). The only exception is January in the years 2000–2002 (due to the prolongation of the fiscal years), when the Ministry of Finance made prior VAT refunds for February to taxable persons because VAT gross payments were higher than expected. As a consequence, VAT refunds in February were lower (Voje 2001).

As expected, VAT refunds started to decrease in the third month after EU accession, but the decrease was lower than expected[18] (more in Chapter 4).

It can be estimated that monthly VAT refunds in the period from 2000–2004 increased, on average, by EUR 1.6 million. The accession to the EU, which was reflected in August 2004, led to a decrease of refunds amounting to EUR 49 million. Because of the prolongation of the fiscal year, refunds increased on average by EUR 154 million in January 2000–2002 (Figure 7 and Appendix 1c).

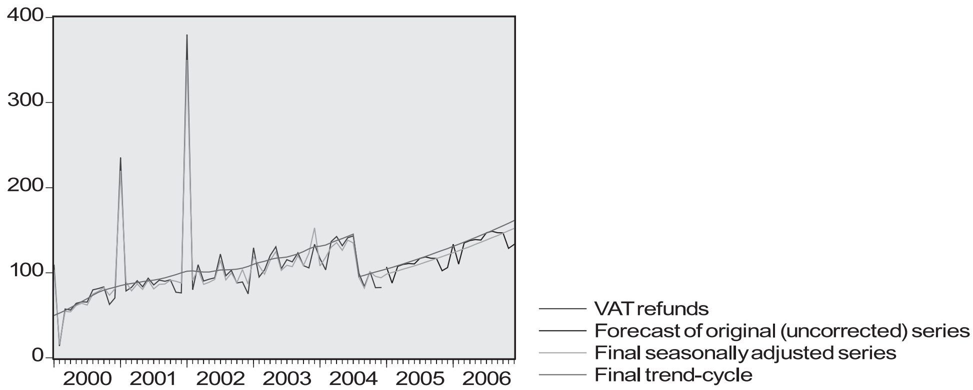
Figure 6: *VAT refunds in the period between 2000 and 2004 (in millions of euros)*



Data Source: Ministry of Finance.

[18] In July 2004, refunds to exporters were, due to a relatively high input VAT after calculations for May, still high, as were the refunds to non-exporters in August.

Figure 7: VAT refunds and their forecasts for the period between 2000 and 2006 (in millions of euros)



Data Source: Ministry of Finance and own calculations.

The forecasts for the period 2005–2006 show that VAT refunds should have ranged from EUR 88 million to EUR 149 million. For both years, the minimum refunds were estimated for February (2005: EUR 88 million; 2006: EUR 110 million) and the maximum refunds for August (2005: EUR 119 million; 2006: EUR 149 million).

In fact, in 2005, monthly VAT refunds were on average EUR 16 million lower than estimated. The refunds were as expected the lowest in February (EUR 61 million) and the highest in April (EUR 145 million) (see Appendix 2).

VAT refunds have, due to their scope, a huge influence both on the liquidity and the execution of the national budget. Therefore, it is important in some situations that refunds are not made before the last possible term. Voje (2001) stresses that in case of a delay of monthly VAT gross payments and excise duties (which is the reason for the liquidity problems of the budget at the end of the month), refunds, which are to be made on the last day of a month, should also be delayed until the first working day of the subsequent month. The same rule, which gives taxable persons the right to delay payments without paying interest on delays, if the payment is to be made on a non-working day, can also be applied for the state.

4 Reasons for the decrease of VAT revenue after May 1, 2004

The majority of states faced the (liquidity) reduction of revenue at the time of their accession to the EU. Numerous reasons for such a situation can be found in existing literature, yet the literature does not mention the measures to avoid such reductions or give advice on how to prepare for such events and prevent negative consequences for budget liquidity.

As has already been stated, because of EU accession, a decrease in VAT in the amount of EUR 54 million was planned in the Slovenian budget for 2004. Later, it became obvious that the decrease would be higher than expected. A lower VAT value calculated on imported goods and services was not compensated by appropriately higher VAT gross payments and lower VAT refunds. The final decrease in VAT revenue amounted to almost EUR 96 million. The difference between collected VAT and expected VAT is due to the following reasons (Draft materials of the TARS):

1. *High imports during the months before accession to the EU*;

During the first six months of 2004, imports were 35 % higher than the imports in the same period in 2003, with the highest increase in April and May, which is most probably due to speculations of companies before the introduction of amendments related to VAT charging and paying. As a consequence, input VAT on imports was higher, which caused a huge liquidity deficit of VAT gross payments in June, July and August.

According to Article 118 of the Rules on the Implementation of the Value Added Tax Act (2004) a taxable person cannot exercise his right to deduct input VAT on imported goods before the tax period in which he receives customs declaration for releasing goods into free circulation or before he receives the decision of customs authorities, on which the VAT has been calculated. In May, taxable persons frequently received customs declarations for their imports in April. This means that companies paid, in accordance with the old procedures, VAT on imports to the CARS[19] and then exercised their right to deduct input VAT for imported goods in the tax calculations for May, which were submitted to the TARS in accordance with Article 38 until the last working day in June, when they made VAT payments to the national budget. It is thus logical that refunds made to exporters, who received refunds in July, after the calculations for May, and to others, who received tax refunds in August, remained high during the first couple of months after EU accession.

[19] In accordance with the Slovenian customs regulations before May 1, 2004, VAT on imports of goods was paid to the national budget within 30 days from the receipt of the customs declaration or on the 15th of the month, following the month when the goods were released into free circulation. After May 1, 2004, taxes were to be paid ten days after the receipt of the customs declaration, or before the 16th day of the following calendar month.

2. *Changed ratio between imports from third countries and intra-Community acquisitions*;

The assumption that the scope of acquisitions from all EU member states would amount to approximately 80 % of the previous imports of goods was not fulfilled. After calculations for May, the scope of acquisitions from EU member states amounted to only 63 % of aggregate imports. After the July calculations, the number was closer to the above-mentioned assumption, since it amounted to 78 %. As the share of imports from third countries was at the beginning substantially higher than planned, VAT gross payments did not increase as expected.

One of the most important reasons for a different ratio between imports and intra-Community acquisitions is the procedure of closing customs warehouses, due to which taxable persons paid customs duty and VAT on imports (in May) for a large quantity of goods kept until then in those warehouses. This means that they deducted input VAT and, consequently, kept receiving high VAT refunds for a couple of months.

3. *Changed ratio between domestic acquisitions and domestic supplies (trade within the territory of Slovenia)*;

After the VAT calculations for May 2004, the ratio between domestic acquisitions and supplies changed substantially. By comparison, the share of domestic acquisitions in total trade for the period October 2003–April 2004 amounted on average to 85 %, whereas in the tax period May 2004 it amounted to 97 %. A high share of acquisitions means a smaller difference between input and output VAT, and, subsequently, lower VAT payments (due to this, VAT payments in June were lower than expected).

The following reasons can be mentioned with regard to a high share of acquisitions in May:

- increased purchases of fixed assets;
- investments;
- the beginning of the season in some sectors (e.g. in the building sector, where warehouses are being stocked with building materials);
- increased import purchases; as it has already been said, the imports of taxable persons were higher than usual due to the closing and clearing of customs warehouses.

4. *Tax evasions and mistakes made by taxable persons in VAT calculations;*

In the EU, where there are no fiscal borders, effective tax control is rather difficult. TARS receives monthly VAT calculations, on which only imports from the EU are recorded, in addition to our fictitiously charged input VAT on one side and our output VAT on the other side. TARS has to check the origin of invoices and find out if the goods are from the EU member states. The following is likely to happen (Stanovnik 2002):

a) zero-rated goods declared for export, would become domestic final consumption or
b) zero-rated goods in state A, would become final consumption in state B, which would mean that the final consumer in state B would not pay VAT.

It is thus important for an exporter in state A to check if the buyer in state B is a taxable person and to submit the declaration to the tax authority in state A when selling goods that are exempt from VAT. This would prove that goods actually left state A (Tax policy in the European Union, 2000).

According to some estimates, VAT-related tax evasions due to fictitious exports amount to around EUR 70 billion annually in the EU (Stanovnik 2002). In Slovenia, long-term loss of VAT due to tax evasions is likely to reach between 0.5 % and 1 % of GDP (Kolar 2003). Estimates of the extent of tax evasion differ substantially from state to state and depend on many factors, namely the stability of the tax system, the experience and competence of tax authorities to control taxable persons, and on the quality and speed of data exchanged between tax authorities in the member states.

5. *Excess VAT was carried forward less often after June 2004;*

Carrying forward the excess VAT means that the taxable person does not claim refunds for a certain tax period and carries forward his right into the next period.

Summary and conclusions

It was expected at the time of Slovenia's EU accession, when a large part of imports became intra-Community supply, that, on one hand, payments of VAT on imports would decrease and that, on the other hand, VAT gross payments would increase and VAT refunds would decrease. If such a forecast had come true, only a liquidity delay for both VAT payments and returns would have appeared due to legal regulations regarding deadlines for the submission of tax calculations.

The effect, which was actually achieved, was less favourable then the one estimated – VAT on imports decreased, without being compensated by appropriately higher VAT gross payments or lower VAT refunds. In addition to the liquidity delay, a real loss of VAT revenue followed, which amounted to EUR 150 million at the end of 2004. A loss of EUR 54 million was estimated in the budget, whereas EUR 96 million represented an additional, unexpected loss of revenue.

Our estimates show that in the next tax periods, revenue from VAT should stabilise. However, if we compare the amount of VAT revenues from the adopted budget for 2005 (approximately EUR 2.5 billion), the actual realisation of these revenues (approximately EUR 1.4 billion) and our estimates for 2005 (approximately EUR 2.9 billion), we can conclude that the results of our regression models are far too optimistic.

But on the other hand, our regression models seem to be very precise if we compare the amount of VAT revenues from the adopted budget for 2006 (approximately EUR 2.7 billion) and our estimates for 2006 (also approximately EUR 2.7 billion). Therefore, it will be very interesting to see the actual amount of VAT revenues at the end of this year.

The realisation of VAT revenues in the next tax periods certainly depends on numerous factors, namely on the behaviour of taxable persons (tax evasion), which is rather difficult to predict, on tax control, where the exchange of information between taxable persons and tax authorities within the EU plays an important role, and the development of information systems. However, one of the biggest problems in the EU in the field of VAT is tax evasion, which can hardly be predicted, but, as has been mentioned earlier, have an important influence on VAT revenue and, consequently, on the liquidity and execution of the national budget. As a matter of fact, unexpected VAT revenue losses could force the government into more long-term borrowing to finance increased budget deficit.

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Appendix 1: Results of regression function assessments

a) Payments of VAT on imports

$$VAT\ import_t = 95{,}2657 + 1{,}6791t + 112{,}8714jan - 145{,}6732level_6$$

	t =	(23,9927)	(13,0788)	(13,2662)	(-21,5469)
	se =	(3,9706)	(0,1284)	(8,5082)	(6,7607)
	p =	(0,0000)	(0,0000)	(0,0000)	(0,0000)
	n = 60				
	R^2 = 0,9162				
Adjusted	R^2 = 0,9117				

where $VATimport_t$ = VAT on imported goods and services, t = a time trend, *jan* = prolonged fiscal year; *jan* = 1 in January 2000-2002 and *jan* = 0 in other months, $level_6$ = a dummy variable to account for level shift, which happened in June 2004, when revenue loss from import VAT was noticed for the first time; $level_6$ = 1 for period beginning in June 2004 and $level_6$ = 0 for period before June 2004.

b) VAT gross payments

$$VAT\ payments_t = 97{,}4189 + 1{,}0620t + 123{,}1436jan + 72{,}0894level_7 + 67{,}3646level_{11}$$

	t =	(31,2776)	(10,7412)	(18,3012)	(11,3180)	(7,0462)
	se =	(3,1147)	(0,0989)	(6,7287)	(6,3695)	(9,5605)
	p =	(0,0000)	(0,0000)	(0,0000)	(0,0000)	(0,0000)
	n = 60					
	R^2 = 0,9511					
Adjusted	R^2 = 0,9475					

where $VATpayments_t$ = VAT gross payments, t = a time trend, *jan* = prolonged fiscal year; *jan* = 1 in January 2000-2002 and *jan* = 0 in other months, $level_7$ = a dummy variable to account for level shift, which happened in July 2004 – see Chapter 4; $level_7$ = 1 for period beginning in July 2004 and $level_7$ = 0 for period before July 2004, $level_{11}$ = a dummy variable to account for level shift, which happened in November 2004 - see Appendix 3; $level_{11}$ = 1 for period beginning in November 2004 and $level_{11}$ = 0 for period before November 2004.

c) VAT refunds

$$VAT\ refunds_t = 51{,}2507 + 1{,}5975t + 153{,}9301jan - 48{,}7861level_8$$

	t =	(8,1023)	(8,1034)	(11,1656)	(-4,0502)
	se =	(6,3255)	(0,1971)	(13,7861)	(12,0452)
	p =	(0,0000)	(0,0000)	(0,0000)	(0,0002)
	n = 60				
	R^2 = 0,7385				
Adjusted	R^2 = 0,7245				

where $VATrefunds_t$ = VAT refunds, t = a time trend, *jan* = prolonged fiscal year; *jan* = 1 in January 2000-2002 and *jan* = 0 in other months, $level_8$ = a dummy variable to account for level shift, which happened in August 2004 - see Chapter 4; $level_8$ = 1 for period beginning in August 2004 and $level_8$ = 0 for period before August 2004.

Appendix 2: A comparison between actual and forecasted VAT revenue in 2005

Figure 8: *VAT on imports (in millions of euros)*

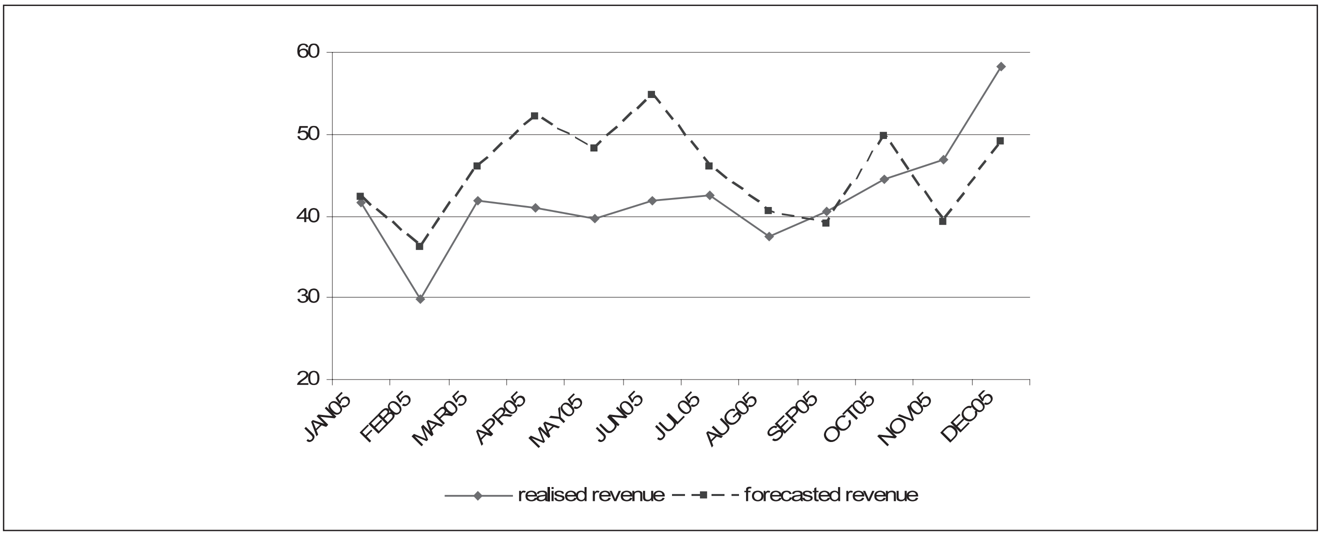


Figure 9: *VAT gross payments (in millions of euros)*

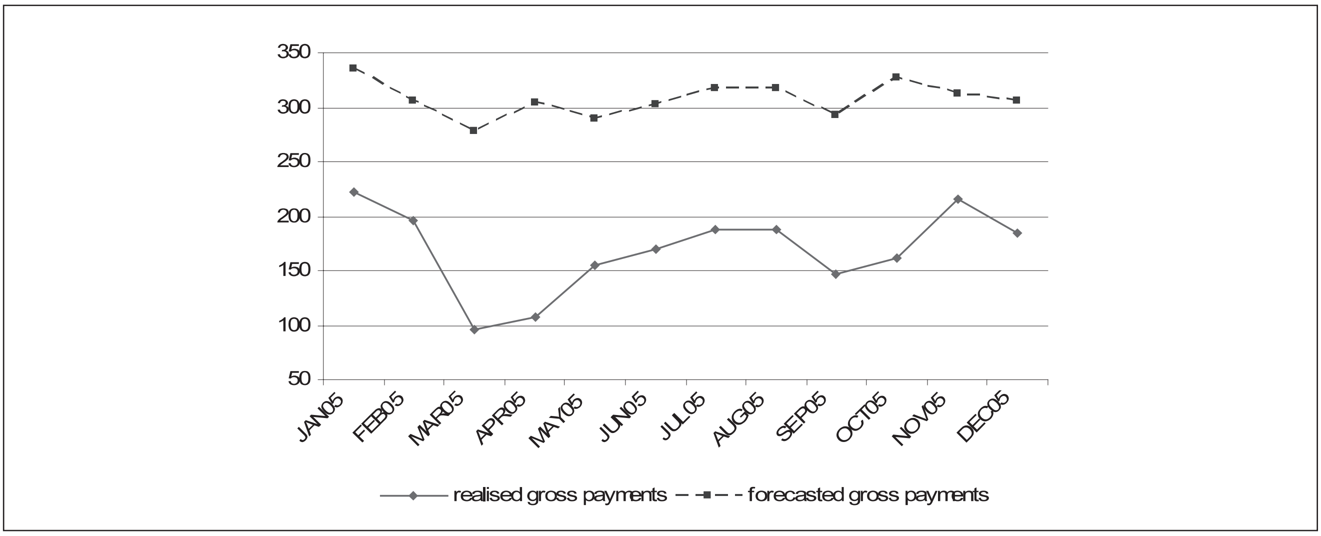
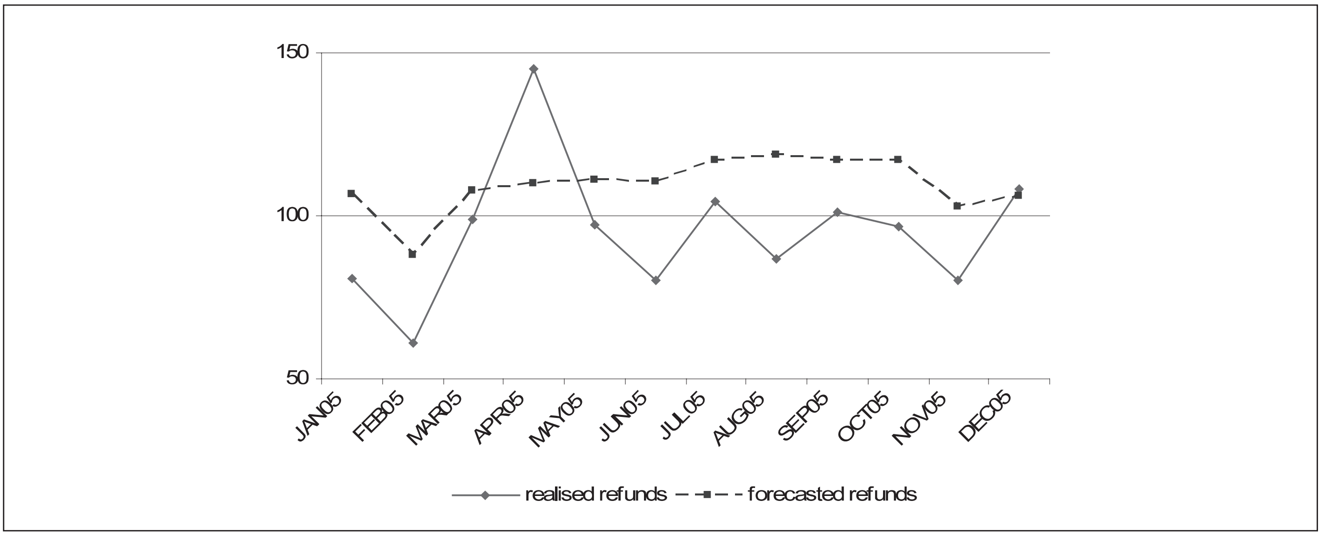


Figure 10: *VAT refunds (in millions of euros)*



Appendix 3: The effect of the amended Article 40 of the Value Added Tax Act

In October 2004, amendments to the Slovenian Value Added Tax Act were accepted, which was in force from May 1 until the end of October 2004 on the initiative of the European Court of Justice. The amendments took formal effect in the November tax period, i.e. for tax calculations, which were submitted by taxable persons, whose tax period is the calendar month, by the end of December.

Article 40 of the Value Added Tax Act (2003) allowed taxable persons to take into account all invoices for the input VAT, which they received for the trade of goods and services on their behalf, if the services had been performed or the goods received in the tax period to which the tax calculation refers and if the invoice had been issued in the tax period to which the tax calculation refers, and the taxable person received the invoice before they submitted their tax calculation to the tax authority.

According to the amended Article 40 (Value Added Tax Act, 2004) the deduction of input VAT can be taken into account in the tax calculation, in which the taxable person receives the invoice for the trade of goods and services on his behalf. In this way, the possibility for tax evasion through so-called *tax roundabouts* is limited. They represent the most frequent form of tax evasion in trade between EU member states in which the supplier never pays the charged VAT into the national budget, whereas the buyer of the goods exercises his right for the refund of the charged VAT.

The above-mentioned amendment of the Value Added Tax Act can be illustrated by the following example:

Example 2: *Article 40 of the Value Added Tax Act – before and after the amendment*

Conditions: *goods supplied: November* 25 *invoice issued*: November 25 *invoice received*: December 3

According to Article 40 of the Value Added Tax Act before the amendment, a *taxable person*, who received the invoice, would take into account the amount of VAT stated on the invoice as input tax *in November's VAT calculation*, which would have to be submitted by December 31 at the latest, under the condition that the tax calculation is submitted after the invoice has been received (after December 3).

According to the amended Value Added Tax Act, a *taxable person* can use the received invoice as the basis for the deduction of input VAT not earlier than *in December's VAT calculation*, which must be submitted by the last working day in January.

In both cases, the *supplier of goods* presents the same amount of VAT as his commitment to the national budget (output VAT) *in November's VAT calculation*, submitted until the end of December and for which he makes a payment to the national budget after his input VAT has been deducted.

The amendment of Article 40 of the Value Added Tax Act causes a liquidity shift. Taxable persons, who do not receive the invoice in the same tax period, in which it was issued, have to carry the liquidity burden of the input VAT for a month longer (they pay it to the supplier, who pays it to the national budget). They can exercise their right for deduction when they receive the invoice. This was the main reason for substantially higher VAT gross payments and lower VAT refunds in November and December 2004 than in previous months.