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MACROECONOMIC EFFECTS OF THE INTEGRATION WITH THE EU: VAT IN AGRICULTURE

1. Introduction

As far as taxation is concerned, including value added tax, agriculture has always been treated in a slightly different way compared to other sectors. Special VAT treatment was due to high collection and administration costs in agriculture. Moreover seasonal output and time discrepancy between outlay and output makes measurement and payment procedures even more complicated. Another reason behind this solution is regressivity of VAT.

Yet economic theory would suggest that agricultural products should be subject to VAT (Ebrill at al. 2001, p. 102). However in transition period high collection costs may diminish benefits stemming from this approach. A compromise is exemption of agricultural products from VAT. Then farmers are not subject to tax administration when reduced VAT rate enables them to recover at least part of tax charged in inputs.

The aim of this article is to show economic effects of VAT in agriculture. A variety of approaches employed by different EU member states and Poland will enable us to pursue a simulation analysis of effects of the flat rate and the normal tax schemes. Then we will prove that VAT exerts an influence on area and production concentration in Polish agriculture.

2. VAT in the European and Polish agriculture

In the EU regulations concerning value added tax are provided for in the 6th Council Directive of 17 May 1977[1] whereas in Poland in *Act of 8 January 1993*

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[1] Council Directive 388/77/EEC on the harmonisation of the laws of the Member States relating to turnover tax – Common system of value added tax: uniform basis of assessment (OJ L No 145 of 13.06.1977).

on goods and service tax and excise[2] and especially the amendment of 20 July 2000 that came into force on 4th September 2000.

The 6th Directive provides for a common scheme for farmers in relation to agricultural undertakings. The directive does not give a definition of this term, instead, it provides for some features that legislators in Member States should consider. According to these guidelines, agricultural activity involves 5 fields of production: crop production, stock farming, forestry, fisheries and processing of products deriving essentially from own agricultural production. (the last activity is not classified as agricultural production activity in Polish legislation and thus is not subject to "agricultural" VAT, in Poland only unprocessed goods can be regarded as agricultural products). The 6th Directive provides for list of services that are also subject to common flat rate scheme (this has not been applied in Polish legislation).

VAT in agriculture both in the EU and Poland is applied in twofold scheme. Some agricultural producers apply the normal value added tax scheme, whereas others prefer the flat rate scheme (*Flat Rate Compensation* in the EU, *flat rate refund system* in Poland) which is supplementary to general VAT taxation scheme both in the EU and in Poland. Its rules are laid down in article 25 of the 6th Council Directive and article 7 of the Polish Act that make up for the basis of the flat rate scheme for farmers in the EU and Poland, respectively.

2.1. The VAT flat rate scheme and its impact

The simplified flat-rate scheme for farmers is based on two guidelines:

1) establishing tax rules that would apply to some farmers where the application of the normal value added tax would give rise to difficulties;

2) granting farmers a partial VAT refund of tax charged on purchases of agricultural inputs like agricultural machinery, fodder, fertilizers, fuel etc.

Application of the simplified flat rate scheme is not obligatory. The European Commission left it to individual Member States to decide what taxation system they wish to apply for the agricultural sector. If a Member State would choose the flat rate scheme it is required to give farmers subject to the flat rate scheme a possibility to choose between this scheme and the normal VAT scheme. The EU legislation also provides for a possibility for a Member State to apply exemption from the flat rate scheme for certain categories of farmers. It applies especially to those producers that conduct a wide range of activities and

[2] *Act of 8 January 1993 on goods and service tax and excise* [Dz. U. 1993, No 11, item 50 with further amendments].

can be treated on equal terms as other VAT taxpayers. The flat rate scheme is not applied in Denmark, Finland, Portugal and Sweden.

Flat rate compensation is a direct effect of excluding flat rate farmers from the possibility to deduct input VAT. The flat rate compensation is supposed to compensate for VAT charged on inputs, but the refund level should be balanced so as the refund does not exceed the paid VAT. In order to ensure that the EU legislation provides for the method to calculate flat rate compensation percentages on the basis of macroeconomic statistics supplied by flat rate farmers. Additional protection against overestimated refund is a mechanism of relative compensation.

Member States may provide for compensation to the farmer to be paid (Kiszka 2000):

- By the purchaser of agricultural products or services. In this case the taxable person to whom a flat rate farmer supplied products or services is obliged to add to purchase price the amount of flat rate compensation and then he can deduct the compensation as input tax from his output tax. In Poland the solution is similar;
- Indirectly, by the public authorities. This model is applied for example when a flat rate farmer delivers goods or services to public sector and firms not liable to tax. A given Member State decides upon a compensation method to be applied in this case.

The flat rate VAT compensation seems to be a good solution for farmers, especially for small farm owners. According to the studies carried out in the EU, application of this scheme in practice raises some difficulties and the most important are (Ebrill at al. 2001, p. 103):

1) The flat rate does not correspond exactly to farmers' expenditures on inputs. Studies conducted in Spain in the 80s showed that depending on type of production VAT charged on inputs was approximately from 1.1% (for olives) to 5.7% (for gardening).

2) Some Member States give all farmers, regardless their output volume, the possibility to choose between flat rates. If a flat rate is low a lot of big farmers prefer the normal tax scheme since the flat rate scheme does not allow for recovery of VAT charged on inputs. But if flat rate compensation percentage is high farmers can choose the flat rate scheme, though the Commission recommends it for small farms.

3) The problem to fix the flat rate is whether to include direct agriculture export or not. Inclusion of export results in increase of final prices abroad what means worse competitiveness of agricultural products. Excluding export, on the other hand, reduces export since farmers keep lower prices on domestic market and by doing so they do not get compensation for VAT charged in

capital goods. Hence the Commission suggests that direct export be subject to compensation and purchasers in foreign markets should have the possibility of VAT refund.

4) The status of the flat rate tax is not fully defined. On one hand, the flat rate is not a typical VAT rate, but it is treated as tax deduction from inputs from those who purchase products from farmers. As a result compensation is fixed for "average farmer", regardless of harvest and other unpredictable factors.

To sum up, in the light of the 6th Directive flat rate farmers can benefit from exemption from liability to calculate and pay taxes on their agricultural products and services and from lack of flat rate compensation for input VAT. Exemption from tax liability entails further benefits and so flat rate farmers do not have to register for VAT and keep books.

2.2. VAT rates in agriculture

VAT system for agriculture differs between Member States. The tax is similar in its form, but there are clear differences when we look in detail. One of major differences is rate levels and their number. The products in given rate ranges are also different. Among EU countries only Sweden and Denmark have the same 25% VAT rate on all products and services.

Although the 6th Directive clearly states that reduced rate cannot be lower than 5% and zero-rated VAT can be applied only for export, some Member States do not meet these requirements. Zero-rated VAT for majority of agricultural products is used in Ireland and United Kingdom (it concerns farmers subject to the normal tax scheme, flat rate compensation percentage for flat rate farmers is established on the level of 4% in Great Britain and 4.2% in Ireland). Similarly in Portugal reduced rates are applied in agriculture i.e. 5% for fresh fruit and vegetables, honey, table wine, 12% for dried fruit and flowers and zero rate for the rest of products (but farmers do not have an option to choose the flat rate scheme for VAT). In some member states, despite directive recommendations, product exemptions are applied for certain groups of products (e.g. animal produce in France, unprocessed goods in Spain) as well as producer exemptions (e.g. certain groups of producers in France). Detailed information on VAT rates in EU countries and in Poland is depicted in Tab. 1.

Table 1. VAT rates for agricultural products in the EU and in Poland in 2000

Country	Standard rate	Goods	VAT rate	
			normal scheme	flat rate scheme
Austria	20.0	Most products	10.0	10.0
Belgium	21.0	Most products	6.0	6.0
Denmark	25.0	All products	25.0	–
Finland	22.0	All products	17.0	–
France	20.6[a]	Most vegetable products	5.5	3.05
		Wine	20.6	–
		All livestock products except animals for meat	–	3.05
		Animals for meat	–	4.0
		Products sold through a producers' group:		
		Fruit, vegetables, wine	–	3.05
		Pigs, eggs and poultry	–	4.0
Greece	22.0	Most products	8.0	8.0
		Wine, cotton, raw tobacco, wool and raw hides	18.0	18.0
Spain	16.0	Products used for human and animal feed, other than wine	7.0	4.5
		All products not used for human and animal consumption, wine	16.0	4.5
		All unprocessed products, except those from independent breeders	–	4.5
Netherlands	17.5	Most products	6.0	5.93
		Tree nursery products	17.5	5.93
Ireland	21.0	Horses, live cattle, sheep, pigs, goats	4.2	4.2
		Other agricultural products	0.0	4.2
Luxembourg	15.0	Most products and services	8.0	8.0
Germany	16.0	Most products	7.0	9.0
Portugal	17.0	Fresh vegetables and fruit, honey, regular table wine	5.0	–
		Dried fruit, flowers	12.0	–
		Other agricultural products	0.0	–
Sweden	25.0	All products	25.0	–
United Kingdom	17.5	Products generally used for human and animal consumption (including seeds, seedlings and animals)	0.0	4.0
		Other products and services	17.5	4.0
Italy	20.0	Most plant products, oilseeds, olive oil, butter, cheese	4.0	4.0
		Eggs, raw milk	10.0	9.0
		Cattle	10.0	7.0
		Pigs	10.0	7.5
		All other products	20.0	4.0
Poland	22.0	Unprocessed agricultural products	3.0	3.0

[a] Now 19,6%.

Source: the European Commission, Eurostat.

Table 2. VAT for agricultural inputs in the EU countries in 2000

Country	Inputs	VAT rate (%)
1	2	3
Austria	Diesel fuel for heating, gas, electricity	20.0
	Animal feedingstuffs, fertilizers, water	10.0
	Purchase and tenancy of land	0.0
Belgium	Purchase and tenancy of land	([a])
	Animal feedingstuffs, seeds, fertilizers, agricultural services, veterinary services	6.0
	Coal (solid fuel)	12.0
	Construction and maintenance of farm buildings, farm equipment, pesticides, fuel, gas, electricity	21..0
Denmark	Purchase of land and buildings	0..0
	All products	25.0
Finland	Most products	22.0
	Animal feedingstuffs	17.0
France([b])	Non-processed agricultural products (including breeding stock), work under contract	([a])
	Fertilizers, animal feedingstuffs, pesticides	5.5
	Construction and maintenance of farm buildings, most services	20.6
	Petroleum products	20.6 ([c])
Greece	Purchase and tenancy of land, manual workers' wages, insurance premiums	([a])
	Seed animal feedingstuffs, breeding stock, fertilizers, pesticides	8.0
	Most farm equipment, repair and maintenance of machinery, motor fuels,	
	Installations and buildings, electricity, lubricants, LPG, wire fencing	18.0
Spain	Purchase and tenancy of land	([a])
	Inputs of agricultural origin, pharmaceuticals, most services	7.0
	Inputs of industrial origin	16.0
Netherlands	Indemnity insurance, purchase, renting and tenancy of immovable property	([a])
	Seeds, fertilizers, fuel for heating, feedingstuffs, breeding stock, some services, pesticides, pharmaceuticals, work under contract, equipment	6.0
	Telecommunications, veterinary services, fuels, agricultural equipment and accessories maintenance and repair of farm buildings, transport services, electricity	17.5
Ireland	Feedingstuffs, fertilizers (10 kg and more), cereals, beet, hay, cake etc., seeds and propagating material, veterinary products for oral administration	0.0
	Concrete and blocks of concrete, electricity, solid fuels, oil for heating, gas diesel fuel for tractors, most services, machine repair	12.5
	Fertilizers (less than 10 kg), pesticides, disinfectants and detergents, veterinary products for injection and veterinary equipment, farm equipment including tractors, building materials, second-hand goods, petrol and lubricants, motor vehicles and motorcycles, other services	21.0

1	2	3
Luxemburg	Lease, hire and transfer of movable property	(a)
	Inputs: seeds and propagating material, livestock and livestock products, feedingstuffs, fertilizers, pesticides, pharmaceuticals, agricultural services	3.0
	Gas and electricity	6.0
	Veterinary services, solid fuels, mineral oils	12.0
	Farm machinery and equipment, construction and maintenance of farm buildings motor fuels, some services (e.g. transport)	15.0
Germany	Purchase of land	(a)
	Inputs of agricultural origin (feedingstuffs, seeds etc.)	7.0
	Inputs of industrial origin (fertilizers, pesticides, electricity and fuel, buildings and machinery, building materials and accessories)	
	Non-agricultural services	16.0
Portugal	Fertilizers and pesticides, animal feedingstuffs, seeds, live animals, machinery, equipment and tractors	
	Electricity, fuels and gas	5.0
	Maintenance and repair of machinery, petrol, coal	17.0
Sweden	All products and services	25.0
United Kingdom	Interest relief grants on purchase and renting of land, insurance, financial costs	(a)
	Most products generally used for human and animal consumption, water	0.0
	Power fuels (except road diesel fuel, petrol), domestic electricity, electricity	5.0
	Petrol, lubricants, road diesel fuel, fertilizers, chemicals, agricultural machinery	17.5
Italy	Agricultural loans, rural leases	(a)
	Animal feedingstuffs of vegetable origin	2.0
	Work under contract	10.0
	Fertilizers	4.0
	Animal feedingstuffs of animal origin, seeds, breeding stock, pesticides, products of mineral and chemical origin, additives for animal feed, fuels, lubricants, pharmaceuticals	10.0
	Machinery and equipment, gas and electricity, building materials, most services	20.0

(a) exempt; (b) refunded; (c) deductible VAT if the product is used only for agricultural purposes.

Source: As same as Tab. 1.

Likewise agricultural products, rates for agricultural inputs vary between Member States (detailed information is given in Tab. 2). In majority of member states rates are differentiated in a following way:

1) Typical inputs (except machinery and agricultural equipment) are subject to reduced rate, that is usually equal the rate for unprocessed goods, and other goods and services are subject to standard rate (France).

2) Inputs of agricultural origin (animal feedingstuffs, seeds etc.) are subject to reduced rate (as the rate for unprocessed agricultural products) and inputs of industrial origin (pesticides, fertilizers, machinery) are subject to standard rate (e.g. Spain, Germany).

3) All inputs typical for agricultural production (including machinery and equipment), as well as electricity, fuels (except petrol) are subject to reduced rate (e.g. Portugal).

4) Diverse reduced rates are applied for different groups of inputs and standard rate is applied for products of general use like petrol (e.g. Luxemburg, Italy).

5) Zero rated VAT is applied for inputs of agricultural origin, reduced rate for inputs of industrial origin (e.g. pesticides) and standard rate for other goods and services (United Kingdom and Ireland).

6) Flat rate VAT for all (Denmark) or some inputs for agricultural production (Finland, where reduced rate is applied to animal feedingstuffs).

7) Purchase or tenancy of agricultural land is usually exempt from VAT or subject to zero-rate.

3. The flat rate or normal tax scheme: simulation analysis

As it has been mentioned individual Member States can introduce the flat rate VAT scheme. It is not obligatory, though. Neither are farmers determined to choose a given option. The analysis below shows financial effects of such a solution (on macroeconomic scale and per 100 ha of arable land) in Member States and in Poland. However these are only estimations calculated on the basis of data published by Eurostat and the Polish Central Statistical Office (GUS) that cover agricultural output value, agricultural costs and their structure as well as VAT rates given in table 1 and 2.

The analysis is based on a purely technical assumption that all farms are homogeneous. It gives a possibility to analyse effects of choice between the normal tax scheme and the flat rate scheme. This is only a simulation and we assume that all farms are liable to VAT following either only normal tax scheme or flat rate scheme, which in reality is not the case.

Table 3 clearly shows that the normal VAT scheme is more beneficial from the point of view of the public budget. In majority i.e. 12 Member States the difference between output and input VAT is positive and this amount would go to the public budget provided all farmers are subject to the normal tax scheme. For the whole EU this amount would account for more than 3 billion EUR, Italy and Spain contributing the biggest VAT revenues to the EU budget due to considerably low production costs and consequently low value of input VAT.

These two countries have the biggest number of farms in the EU (2.3 million farms in Italy and 1.2 million farms in Spain), but average VAT transferred to the EU budget by a statistical farm in both countries is not the highest in the EU. The biggest contribution is made by Denmark and Sweden, countries with the same VAT rate on all products and services what moreover is the highest VAT rate in EU (25%).

Table 3. Theoretical VAT balance in the agricultural sector of Member States and Poland in 2000. Simulation analysis based on assumption that all farmers follow normal tax scheme

The normal tax scheme						
Country	Output VAT (Mio EUR)		Input VAT (Mio EUR)		VAT balance (output VAT – input VAT)	
	total (Mio EUR)	per 100 ha UAA[a] (Mio EUR)	total (Mio EUR)	per 100 ha UAA (Mio EUR)	total (Mio EUR)	per 100 ha UAA (Mio EUR)
1	2	3	4	5	6	7
Austria	436.50	1.28	348.31	1.02	88.19	0.26
Belgium	390.30	2.80	362.14	2.59	28.16	0.20
Denmark	1603.90	6.02	959.52	3.60	644.38	2.42
Finland	514.30	2.33	424.71	1.92	89.59	0.41
France	**2864.80**	**0.96**	**3058.93**	**1.02**	**–194.13**	**–0.07**
Greece	905.10	2.32	289.34	0.74	615.76	1.58
Spain	2218.20	0.87	990.55	0.39	1227.65	0.48
Holland	1004.70	5.08	987.37	5.00	17.33	0.09
Ireland	**29.70**	**0.07**	**302.48**	**0.68**	**–272.78**	**–0.62**
Luxemburg	19.10	1.41	7.92	0.59	11.18	0.83
Germany	2765.20	1.62	2463.88	1.44	301.32	0.18
Portugal	**76.90**	**0.20**	**191.30**	**0.49**	**–114.40**	**–0.29**
Sweden	970.90	3.26	690.46	2.32	280.44	0.94
United Kingdom	**76.40**	**0.05**	**1389.72**	**0.88**	**–1313.32**	**–0.84**
Italy	3194.30	2.07	997.61	0.65	2196.69	1.43
EU	17070.30	1.31	13464.22	1.03	3606.08	0.28
Poland[b]	210.6	0.11	181.6	0.10	29.0	0.01

[a] UAA – Utilised Agricultural Area.

[b] Data for Poland (simulations) calculated for the exchange rate 1 EURO = 4 PLN.

Comment In bold letters are countries that find a given tax scheme more beneficial for farmers.

Source: own calculations on the basis of Eurostat (http://www.europa.eu.int) and the Polish Central Statistical Office (GUS).

Since the average farm area in the EU is between 4.3 ha in Greece and 69.3 ha in Great Britain such an analysis is not precise. Therefore the estimated amounts were given per 100 ha of UAA. And this approach shows that the biggest

contribution to the EU budget is made by Danish farmers whereas the lowest by the Dutch. For public finances the normal tax scheme for VAT does not bring about desirable revenues in those countries that apply zero rated VAT for most agricultural products (Great Britain, Ireland), for some group of products (Portugal) or if some products are exempted from taxation (France).

Table 4. Theoretical VAT balance in the agricultural sector of member states and Poland in 2000
Simulation analysis based on the assumption that all farmers follow the flat rate scheme

Country	Flat rate scheme					
	VAT received by farmers (Mio EUR)		Input VAT (Mio EUR)		VAT refunded (Mio EUR)	
	total	Per 100 ha UAA[a]	total	Per 100 ha UAA	total	Per 100 ha UAA
Austria	**436.50**	**2.80**	**348.31**	**2.59**	**88.19**	**0.20**
Belgium	**390.30**	**2.21**	**362.14**	**1.76**	**28.16**	**0.45**
France	1747.10	0.69	3058.93	1.20	–1311.83	–0.52
Greece	**905.10**	**0.53**	**289.34**	**0.17**	**615.76**	**0.36**
Spain	**1414.80**	**3.63**	**990.55**	**2.54**	**424.25**	**1.09**
Netherlands	**993.70**	**73.61**	**987.37**	**73.14**	**6.33**	**0.47**
Ireland	223.10	0.07	302.48	0.10	–79.38	–0.03
Luxembourg	**19.10**	**0.01**	**7.92**	**0.01**	**11.18**	**0.01**
Germany	**3565.50**	**13.37**	**2463.88**	**9.24**	**1101.62**	**4.13**
United Kingdom	880.90	2.59	1389.72	4.09	–508.82	–1.50
Italy	**2219.60**	**5.02**	**997.61**	**2.26**	**1221.99**	**2.77**
EU	**12795.70**	**1.08**	**13464.22**	**0.94**	**1597.46**	0.13
Poland [(b)]	**210.6**	**0.11**	**181.6**	**0.10**	**29.0**	**0.1**

Comments as in Tab. 3.
Source: As same as Tab. 3.

The flat rate scheme contributes to higher budget revenues then the normal tax scheme in United Kingdom, Ireland or France (see table 4), because in those countries a low flat rate compensation percentage (4%, 4.2% and 3.05 or 4% respectively) does not compensate for the VAT charged on inputs. As for a single farm, farmers from Luxemburg generate biggest profits due to the fact that in Luxemburg VAT rate for basic agricultural inputs is lower than flat rate compensation percentage (3% and 8% respectively). Germany and Italy pay the highest amounts of flat rate compensation percentages if calculated per 100 ha UAA.

The analysis of Polish situation would suggest that the flat rate scheme would be more beneficial for farmers. Nevertheless we need to bear in mind that VAT was introduced in Poland in 2000 and so pro-investment incentives have not been formed yet (additionally we have bad situation in economy and the sector) that would rise the value of input VAT.

4. VAT impact on agricultural activity in Poland

As it has already been said, the idea behind VAT imposition on agricultural products is to compensate farmers, at least partially, for tax charged on inputs. In Poland VAT on agricultural products was established three years ago and thus its impact is not to be seen yet. We shall expect VAT to increase income of farms and constitute pro-investment incentive in the sector. However, this refers mainly to large, specialised farms whereas economically weak farms will gradually be liquidated. Therefore the total number of farms may decrease but the average agricultural farm would increase. Thus a long-term effect of VAT in agriculture in Poland may be farming area concentration and concentration of agricultural production.

It is interesting to identify all these effects, but on the other hand it is not easy because VAT has been in force for a short time. In this article we will attempt to answer the questions put forward in the introduction with the use of regression methods.

Regression equations are formed on the basis of a sample for Poland for years 1989–2001 (annual data). In order to show the impact of VAT on agricultural products; a VAT variable was introduced to the equations. This is a 0–1 variable where 1 is applied for years 2000–2001 and 0 for other years.

On the basis of data published by the Polish Central Statistical Office (GUS) the following equations were formed with the use of the classical Least Squares Method:

$$N = 2193{,}1 - 113{,}7749\ VAT_{t-1} - 3{,}4060\ Q_{t-1} \quad (1)$$
$$t(a_i)\quad (80{,}99)\quad (-3{,}318)\qquad (-4{,}822)$$
$$R^2 = 0{,}880037;\quad DW = 2{,}4833$$

$$PPG = 8{,}531 + 0{,}6858\ VAT_{t-1} + 0{,}04864\ I_{t-1} \quad (2)$$
$$t(a_i)\quad (61{,}47)\ (4{,}600)\qquad (3{,}492)$$
$$R^2 = 0{,}833382;\quad DW = 2{,}3569$$

$$KQZ = -4{,}663 + 2{,}3107\ VAT_{t-1} + 7{,}7065\ KINW_{t-1} + 1{,}5046\ KI_{t-1} \quad (3)$$
$$t(a_i)\quad (-4{,}4226)\ (2{,}194)\qquad (3{,}424)\qquad (5{,}075)$$
$$R^2 = 0{,}967648;\quad DW = 2{,}0513$$

$$KQR = -2{,}838 + 2{,}9038\ VAT_{t-1} + 4{,}5495\ KINW_{t-1} + 1{,}3089\ KI_{t-1} \quad (4)$$
$$t(a_i)\quad (-2{,}223)\ (2{,}382)\qquad (1{,}747)\qquad (3{,}815)$$
$$R^2 = 0{,}934263;\ DW = 1{,}4726$$

where: N – number of farms (thous.)
Q – gross agriculture output (thous. zl)
I – gross nominal disposable income in agriculture (thous. zl)
KI – gross nominal disposable income per farm (thous. zl)
INW – investment outlays in agriculture (thous. zl)
$KINW$ – investment outlays per farm (thous. zl)
PPG – average farm area (ha)
KQR – concentration of crop production (gross crop output per farm in thous. zl)
KQZ – concentration of animal production (gross animal output per farm in thous. zl)

As equations (1) – (4) suggest VAT on unprocessed agricultural products exerts an impact on farm area concentration, but its influence is deleted. The establishment of VAT resulted in reduction of number of farms by 114 thousand while average farm area increased by 0.7 ha. VAT can impact on production concentration too. As its result animal production (per farm) increases by 2 thous. zl (per year) and crop production by about 3 thous.

5. Conclusions

1. Despite recommendations of the European Commission some Member States apply VAT rate below 5% on agricultural products and agricultural inputs (even 0% in Great Britain and Ireland). Moreover some countries (e.g. Spain, Belgium, France) apply exemptions for some goods or groups of producers.

2. VAT contributions to budgets are lower in countries with intensive agricultural production like Holland.

3. The flat rate scheme is more beneficial for an average farmer if the flat rate is high (e.g. Germany, Belgium) or if flat rate for agricultural products is considerably higher that the rate for basic inputs (e.g. Luxemburg).

4. VAT influences on farm area and production concentration in agriculture, but this impact is deleted (at least one year).

References

Council Directive 388/77/EEC on the harmonisation of the laws of the Member States relating to turnover tax – Common system of value added tax: uniform basis of assessment (OJ L No 145 of 13.06.1977).

Council Directive 92/77/EEC of 19 October 1992 supplementing the common system of value added tax and amending Directive 77/388/EEC (approximation of VAT rates) Official Journal L 316 , 31/10/1992.

Council Directive of 16 December 1991 supplementing the common system of value added tax and amending Directive 77/388/EEC with a view to the abolition of fiscal frontiers Official Journal L 272 , 17/09/1992.

8th Council Directive of 16 December 1979 on the harmonisation of the laws of the Member States relating to turnover tax – laws on value added tax reimbursement to taxable persons not established in a Member State (OJ L No 331 of 27.12.1979).

The 13th Council Directive of 17 November 1986 on the harmonisation of the laws of the Member States relating to turnover tax – laws on value added tax reimbursement to taxable persons not established in the EU (OJ L No 326 of 21.11.1986).

Ebrill L., Keen M., Bodin J.-P., Summers V. (2001), *The Modern VAT*, International Monetary Found, Washington.

Kiszka J. (2000), *Opodatkowanie rolnictwa podatkiem od wartości dodanej*, „Prawo Unii Europejskiej", nr 5.

Polakowski D. (2000), *VAT od produktów rolnych i niskoprzetworzonej żywności wprowadzony od 4.09.2000 r.*, Expert. Wydawnictwo i Doradztwo, Wrocław.

Roczniki Statystyczne GUS 1990–2002.

Tait A. A. (1988), *Value Added Tax. International Practice and Problems*, International Monetary Found, Washington D.C.

Tomczyk S. (2000), *VAT w rolnictwie*, Difin, Warszawa.

Act of 8 January 1993 on goods and service tax and excise (Dz. U. 1993, No 11, item 50 with further amendments).

Zubrzycki J. (2000), *VAT w rolnictwie*, „Przegląd Podatkowy", nr 9 cz. 1 i nr 10 cz. 2.

http://www.europa.eu.int

http://www.stat.gov.pl

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MAKROEKONOMICZNE KONSEKWENCJE INTERGRACJI POLSKI Z UE NA PRZYKŁADZIE PODATKU VAT W ROLNICTWIE

Podatek VAT należy do najważniejszych konstrukcji podatkowych. Pewne dziedziny życia gospodarczego są przy tym objęte specjalnymi rozwiązaniami w tym zakresie. Do obszarów takich należy rolnictwo, które z uwagi na swą specyfikę objęte jest tzw. systemem zryczałtowanego zwrotu podatku, który umożliwia drobnym producentom rolnym rozliczanie się z tej daniny na uproszczonych zasadach. Rozwiązanie takie stosowane jest w większości krajów UE, jednak zwykle na nieco odmiennych zasadach. Różnice tkwią głównie w wysokości stawek VAT na nieprzetworzone produkty rolne oraz środki produkcji typowe dla rolnictwa, ale także w sposobie jego administracji. Powoduje to, że jego efektywność jest zróżnicowana w obrębie Piętnastki. W Polsce podatek VAT funkcjonuje w rolnictwie od niedawna, bo od września 2000 r., przez co jego konsekwencje ekonomiczne nie są jeszcze zbyt wyraźne. Jak wykazały przeprowadzone badania empiryczne, może on jednak stanowić jeden z istotnych czynników koncentracji obszarowej gospodarstw. Może zatem korzystnie wpływać na przemiany agrarne w Polsce.