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## **THE CHALLENGES AND EFFECTIVENESS OF VALUE ADDED TAX RATES AS A DISTRIBUTIONAL TOOL**

### **ABSTRACT**

*In modern states, taxation of consumption, with taxation of personal and corporate income, is the most abundant tax source. As a rule, developing countries such as the Republic of Croatia are mostly turning to taxation of consumption through the general sales tax of goods and services and special taxes, ie excise duties. Until 1 January 1998, consumption in the Republic of Croatia was taxed by the application of sales tax on products and services. The rates were proportional and applied to the selling price. Product and service tax disadvantages were attributable to its cumulative effect, which means that the tax burden was greater when the production process was realized in several phases.*

*Value added tax (VAT) was introduced due to the need to reform the entire Croatian tax system in new economic and political circumstances and the need to harmonize the Croatian tax system with the EU tax system. The extraordinary place and role of this tax was reflected not only in its pronounced financial leverage in relation to other taxes, but also in frequent use as an instrument for regulating supply and demand for certain products.*

*VAT is the net surplus sales tax that is calculated at each stage of the production and sales cycle, but only on the value added that was created at that stage, not on the total production value.*

*Of great importance is the type of rate that applies when it comes to VAT. In the Republic of Croatia there is a fairly high proportional rate which has an adverse regressive effect on a wide circle of taxpayers. In this paper, the authors will discuss and try to analyze the efficiency of VAT rates and how to reduce the regressive effects of VAT through various measures of a positive legal tax system in the Republic of Croatia.*

*We consider it important to note that the framework of this paper does not allow a detailed analysis and that we are forced to limit ourselves exclusively to some aspects of the issue at hand.*

**Keywords:** *VAT, proportional tax rate, reduced tax rate, regressive effect of taxation*

## 1. INTRODUCTION

The principle of social balance of the tax system is one of the important requirements that is now being put before the tax system of each country. It implies that the tax system in itself should not be the source of additional social tensions, since it is only under that assumption that most of the citizens can accept it.

However, the value added tax (VAT), and especially the one where taxation is made on a single-rated system, places the tax burden regressively in relation to the income of the taxpayer. Since the relative share of income spending falls as income rises, the value added tax, cut at a uniform tax rate, harder affects the poorer than the richer population.<sup>1</sup>

The author discusses a set of measures that should be taken within the tax and fiscal system, and the value added tax system, to mitigate or nullify this negative effect.

## 2. THE PRINCIPLE OF THE SINGLE-RATED VAT SYSTEM

Starting from the basic purpose of VAT, which is the collection of tax revenue, whereby VAT is the most abundant tax revenue, „it is now considered that value added tax should be taxed as much as possible on a larger number of products and services, that is to say, it is possible to apply a wider tax base to apply as fewer rates as possible (ideally only one), exemptions should be reduced to as little as possible and avoiding zero rates (except for export taxation).“

Commitment to the one-sided VAT system can be explained by the fact that today, especially in developed countries, social conditions are not needed for the application of preferential tax rates. However, the biggest criticism of the VAT on which taxation is carried out at one rate is that in relation to income, the tax burden is regressively distributed. The regressive effect of the value added tax does not take into account the principle of vertical equity in the allocation of tax burdens.

## 3. MULTIPLE-RATED VAT SYSTEM

VAT is the net surplus sales tax that is calculated at each stage of the production and sales cycle, but only on the value added that was created at that stage, not on the overall production value.

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<sup>1</sup> Šimović, J., *Socijalni učinci poreza na dodanu vrijednost*, Revija za socijalnu politiku, Svezak 5, Br. 2, 1998

[<http://www.rsp.hr/ojs2/index.php/rsp/article/view/337/341>] Accessed 15 February 2018

The added value can be defined as the difference between the value of sales of produced goods and services (outputs) and input value (but not inputs) for which those goods and services are produced. Therefore, added value is the value that the manufacturer adds to inputs before selling them as new products and services.

In the multi-rated VAT system, four levels of tax rates are applied: general (standard), lower (privileged), zero and higher (increased) rate.

A standard or general rate of VAT is the rate for taxing the largest number of products and services that are not subject to a reduced, increased or zero tax rate and which do not apply to tax exemptions.

The reduced tax rate is lower than standard and is generally taxed on product-related life-style products (food products, books, medicines and the like).

The zero tax rate or tax exemption with the right to deduct input tax is such a tax rate whereby the taxpayer pays the VAT on his own sale at a zero rate with the right to deduct the paid VAT paid to suppliers for his purchases as a tax prepayment.<sup>2</sup>

VAT rates, such as their number and height, are subject to frequent changes, especially in the first years of application of this tax.

As a rule, higher VAT rates are taxed for products that are considered to be luxury goods, that is to say, tax on certain products that were more fiscally significant. However, today the increase in taxation of these products is carried out by prescribing excise duty.

### **3.1. Advantages and disadvantages of multiple-rated VAT system**

Advocates of the multiple-rated VAT system suggest the introduction of reduced rates to annul or mitigate the regressive effect of VAT. Such reduced rates should be applied to the products necessary for the existence and fulfillment of basic living needs, which would make the products on the market offered at lower prices, more acceptable to poor citizens.<sup>3</sup>

In support of the multiple-rated VAT system is the fact that the use of reduced tax rates on certain products and services leads to economic growth and increased competitiveness of key sectors.<sup>4</sup>

<sup>2</sup> Jelčić, B., *et al.*, *Financijsko pravo i financijska znanost*, Narodne novine d.d., Zagreb, 2008, p. 383

<sup>3</sup> Cindori, S., Pogačić, L., *Problematika utvrđivanja broja i visine stopa poreza na dodanu vrijednost*, Ekonomska misao i praksa, br. 2, Dubrovnik, 2010, pp. 227-249

<sup>4</sup> Kuliš, D., *Oporezivanje potrošnje: porez na dodanu vrijednost i trošarine*, Newsletter, povremeno glasilo Instituta za javne financije, 33, 2007

In addition to its benefits, there are some disadvantages, in particular in the social sphere. The biggest criticism of the VAT is that in relation to income, the tax burden is distributed regressively.<sup>5</sup> There has been a need to develop certain mechanisms to mitigate or even annul this negative impact of VAT on a social plan. Measures to mitigate or annul the regressive effect are as follows:

1. measures within the VAT system
2. measures within the tax system and outside the VAT system
3. measures beyond the tax system, and within the socio-economic system
4. combined measures.<sup>6</sup>

To mitigate, annul the regressive effect within the VAT system itself, the following measures are generally taken:

- exemption of VAT payments for certain products is introduced
- a system of reduced tax rates is introduced.

As one of the ways of mitigating the regressive effect of VAT, it is common practice to use a system of reduced tax rates for a certain product range. However, although practice has proven that the system of preferential tax rates is a bad income distribution instrument, it has, however, still maintained in some countries as one of the ways of this distribution.

Exemptions from VAT payments, whose purpose of non-taxation is to mitigate regressive VAT activity, is usually related to food products, school supplies, children's shoes and clothing, medicines. The same applies to the system of reduced rates and the zero tax rate for VAT. However, many financial and economic theorists and practitioners believe that the range of these measures to mitigate the regressive effect is limited and often ineffective, so other measures are needed.<sup>7</sup>

In contemporary tax systems, the function of mitigating the regressive effect of VAT within the tax system and outside the VAT system is increasingly taken over by other tax system instruments. The most effective measure to mitigate the regressive effect of VAT is the use of progressive tax rates (in particular broken progressive tax rates) when personal income is taxed in the combination with tax reliefs and exemptions and personal deductions which is called compensatory progression.

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<sup>5</sup> Šimović, J., Šimović, H., *Fiskalni sustav i fiskalna politika Europske unije*, Zagreb, 2006, p. 81

<sup>6</sup> Jelčić, *op. cit.* note 2, p. 365

<sup>7</sup> *ibid.*

The regressive effect of the VAT can be mitigated or annulled by measures outside the tax system. This is primarily achieved through the system of social transfers towards citizens with lower economic strength. Other social policy measures such as child allowance, use of student and student homes, social housing, etc. are also used.

The VAT system with multiple tax rates shows more disadvantages than the one-rated system, which states:

1. A multiple VAT rate system is more complicated in implementation and control, which leads to an increase in administrative costs;
2. Reduced tax rates lead to narrowing of the tax base, which consequently leads to an increase in the general (standard) rate;
3. It is very difficult to clearly and unambiguously identify goods that relate to individual rates, which leads to tax evasion.<sup>8</sup>

There are very strong arguments against the use of a larger number of tax rates in the value added tax system and hence their use to mitigate its regressiveness. These are arguments, above all, in the following:

(1) research of Institute for Public Finance has shown that in the value-added tax system with a graduated tax rate wealthy citizens get twice as much use unlike poor people, measured in absolute amounts. This is because in the value added tax system it is impossible to distinguish, for example, expensive, quality food products from cheap (ordinary) food products purchased by poorer citizens,

(2) the rate-gradation of the value-added tax rate to mitigate regression is a very expensive instrument. Studies of the International Monetary Fund show that in case of transition from one to two tax rates administration and supervision costs increase five times, and if the rate increases from two to three, administration costs are increased ten times,

(3) the application of reduced or zero rates to the amount of revenue set to be collected from the value added tax, necessarily results in an increase in the standard rate. Thus an increased standard rate leads to a distortion of the distribution of the tax burden on consumers and the abandonment of the neutrality principle.<sup>9</sup>

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<sup>8</sup> Jelčić, *op. cit.* note 2, p. 386

<sup>9</sup> Šimović, *loc. cit.*

#### 4. VAT IN THE REPUBLIC OF CROATIA

In modern states, taxation of consumption, with taxation of income, is the most expensive tax source. Until 1 January 1998, consumption in the Republic of Croatia was taxed by the application of sales tax on products and services. The rates were proportional and applied to the selling price. Product and service tax disadvantages were attributable to its cumulative effect, which means that the tax burden was higher when the production process was realized in several phases.

In the first years of the existence of independent Croatia, the pivotal role of fiscal instruments was entrusted to the sales tax. The extraordinary place and role of this tax in those years was reflected not only in its pronounced financial leverage in relation to other taxes, but also in the frequent use as a tool for regulating supply and demand for certain products under the specific conditions of the formation and functioning of a newly founded state caused by war. In the regulation of the taxation of goods, account was also taken of the social repercussions of the application of the sales tax, the place of that tax in the transition to the market economy, the replacement of the taxation of retail trade turnover by the application of value added tax.

The Croatian Parliament passed the first Sales Tax Act on Products and Services by the end of June 1991. An integral part of this law was the Sales Tax Tariff, which has been changed on several occasions. The tariff contained 8 tariff numbers referring to the taxation of the product and 6 tariff numbers for which the sales tax rates were determined. The Act on Sales Tax on Products and Services has undergone numerous changes over the years, especially in 1994, when it was changed five times, which was affected by the fact that the Croatian tax system of that year included taxation of turnover by applying individual sales tax (excise duty excise tax).

The 1994 Taxation Act on Products and Services, as amended (1995 and 1996), was applicable until the beginning of taxation of value-added tax turnover, ie until 1 January 1998. Taxation of traffic by using one-phase retail sales tax can be considered as the longest tax modality, not just traffic, in this area.

Value added tax was introduced due to the need to reform the entire Croatian tax system in new economic and political circumstances and the need to harmonize the Croatian tax system with the EU tax system.

Article 38 of the Law on VAT<sup>10</sup> stipulates that value added tax is paid at a rate of 25%.

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<sup>10</sup> Law on VAT, Official Gazette No. 73/2013, 99/2013, 148/2013, 153/2013, 143/2014, 115/2016

In the Republic of Croatia there are two reduced rates of VAT. Value added tax is payable at a rate of 13% to:

- a) accommodation or accommodation services with breakfast, half board or full board in hotels or similar facilities, including holiday accommodation, rental of premises in camps for recreation or in places designated for camping and accommodation in sailing yachts,
- b) newspapers and periodicals of newspaper publishers having a statute of the media and newspapers and periodicals of publishers for which there is no obligation to adopt the media statute under a special regulation other than those printed on periodically printed paper and other than those containing, in whole or in part, ads or services advertising,
- c) edible oils and fats, plant and animal origin,
- d) car seats for children and baby food and processed cereal-based foods for infants and young children,
- e) the supply of water, other than water placed on the market in bottles or other packaging, in terms of public water supply and public drainage under a special regulation,
- f) tickets for concerts,
- g) the supply of electricity to the other supplier or end-user, including delivery fees,
- h) a public service for the collection of mixed municipal waste, biodegradable municipal waste and separate collection of waste under a special regulation,
- i) urns and coffins,
- j) seedlings and seeds,
- (k) fertilizers and pesticides and other agrochemicals,
- (l) animal feed, other than petfood.<sup>11</sup>

Value added tax is payable at a rate of 5% to:

- (a) all types of bread,
- (b) all types of milk (cows, sheep, goats) marketed under the same name in liquid form, fresh, pasteurized, homogenised, condensed (other than sour milk, yogurt, chocolate, chocolate milk and other dairy products), substitutes for breast milk,

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<sup>11</sup> Article 47 of Ordinance on VAT, Official Gazette No. 79/2013, 85/2013, 160/2013, 35/2014, 157/2014, 130/2015, 115/2016, 1/2017, 41/2017, 128/2017

- c) books of professional, scientific, artistic, cultural and educational content, textbooks for pedagogical education, primary, high school and higher education, in all physical forms,
- d) medicines determined in accordance with the Decree on the Establishment of the Medicines List of the Croatian Institute for Health Insurance,
- e) medical equipment, aids and other devices used to relieve the disability treatment exclusively for the personal use of the disabled prescribed by the Ordinance on orthopedic and other aids of the Croatian Institute for Health Insurance,
- f) cinema tickets,
- g) newspaper of a newspaper publisher who has a media statute printed on a daily paper, other than those containing, in whole or in part, ads or advertising,
- h) scientific journals.<sup>12</sup>

This rate used to be zero tax rate, but the Republic of Croatia had to change it to reduced tax rate as one of the conditions required for membership in the EU.

Croatia's tax system is largely based on „friendly“ VAT, which is the most abundant budget revenue (HRK 45 billion or 63% of tax revenue in the 2016 state budget), and a small change in the tax rate causes large changes in revenue. A room for reducing the standard VAT rate will only be opened if long-term and sustainable rationalization of government expenditures is realized. But even then it may be wiser to lower the „harmful“ taxation of labor and capital and thus encourage growth and employment, and leave a „friendly“ VAT to compensate for such a reduction. Certainly, the flexibility in determining the tax rate of VAT proposed by the European Commission will contribute to making domestic VAT better suited to domestic economic priorities.

## 5. IMPORTANCE OF VAT IN EU

VAT with revenue - which in 2015 amounted to 1 trillion euros - plays a key role in the European common market. Unfortunately, there is also revenue loss, ie „VAT gap“ (the difference between actually collected and expected revenue), which in 2015 amounted to 151 billion euros or 12.7% of total VAT tax liability.

In addition, the EU loses around EUR 50 billion annually due to cross-border fraud and embezzlement. Thus, the huge resources that could be invested in

<sup>12</sup> Law on VAT, Official Gazette No. 73/2013, 99/2013, 148/2013, 153/2013, 143/2014, 115/2016



stimulating economic growth, opening up new jobs, schools, hospitals, etc. are being lost. The Commission is trying to reform VAT and make it more flexible and modern, and reduce revenue losses. Such a policy direction is much better than proposing the introduction of new or increasing existing „more damaging“ tax forms for the loss of VAT revenues. VAT is, in fact, one of the least damaging forms of taxation and especially „friendly“ to economic growth.<sup>13</sup>

According to the basic regulation governing the common VAT system - EU Directive on a common system of VAT - each Member State may apply:

- one standard rate applicable to most deliveries which can not be less than 15%;
- a maximum of two reduced rates for certain deliveries of goods and services, but not less than 5%.

The Directive prescribes which products and services may apply reduced tax rates. Some Member States may also use a number of derogations from the VAT rules, ie additional reduced tax rates. In this way, common rules do not apply equally to all member states, so more than 250 discount tax rates and exemptions are allowed, which allows some countries more flexibility in determining the tax rates unlike the others that are not allowed. This has led to the diversity and inconsistency of the European VAT system.<sup>14</sup>

### **5.1. VAT funds applicable to country of EU membership**

As the opinions of financial experts are divided on the topic of the number of rates, no agreement on the height of VAT rate has been achieved either. The European Union does not prescribe the upper limit of the VAT rate, but the discussions are only about the lower limit.

The standard VAT rate in the EU can not be less than 15 percent, while the reduced rate may not normally be lower than 5 percent. However, in addition to standard and reduced rates, in some Member States, the application is still called:

- a surplus rate - a rate lower than 5 percent
- parking - rate - lower than 15 percent, and higher than 5 percent
- zero rate
- geographic rate.<sup>15</sup>

<sup>13</sup> Kesner-Škreb, M., *Prijedlozi novih stopa PDV-a u Europskoj uniji*, Aktualni osvrti, IJF, br. 101., Zagreb, 2018, p. 3

<sup>14</sup> *cf. ibid.*, p. 1

<sup>15</sup> Cutvarić, *loc. cit.*

The possibility of applying these rates of individual member state of the European Union was obtained during the accession negotiations with the European Union and the exceptions were made possible because the lower rates were in their system before the entry into force of the Sixth Directive (1977) or before accession to the European Union.

**Table 1:** List of VAT rates applied in the Member States (updated twice a year - January & July)- March 2018

Member state	Country code	Standard rate	Reduced rate	Super reduced rate	Parking rate
Austria	AT	20	10/13	-	13
Belgium	BE	21	6/12	-	12
Bulgaria	BG	20	9	-	-
Cyprus	CY	19	5/9	-	-
Czech Republic	CZ	21	10/15	-	-
Germany	DE	19	7	-	-
Denmark	DK	25	-	-	-
Estonia	EE	20	9	-	-
Greece	EL	24	6/13	-	-
Spain	ES	21	10	4	-
Finland	FI	24	10/14	-	-
France	FR	20	5,5/10	2,1	-
Croatia	HR	25	5/13	-	-
Hungary	HU	27	5/18	-	-
Ireland	IE	23	9/13,5	4,8	13,5
Italy	IT	22	5/10	4	-
Lithuania	LT	21	5/9	-	-
Luxembourg	LU	17	8	3	14
Latvia	LV	21	12	-	-
Malta	MT	18	5/7	-	-
Netherlands	NL	21	6	-	-
Poland	PT	23	5/8	-	-
Portugal	PT	23	6/13	-	13
Romania	RO	19	5/9	-	-
Sweden	SE	25	6/12	-	-
Slovenia	SI	22	9,5	-	-
Slovakia	SK	20	10	-	-
United Kingdom	UK	20	5	-	-

Source: European Commission, europa.eu [https://europa.eu/youreurope/business/vat-customs/buy-sell/vat-rates/index\\_en.htm](https://europa.eu/youreurope/business/vat-customs/buy-sell/vat-rates/index_en.htm)

From the old member states only Denmark applies a single-rated taxation system with zero rates for individual domestic deliveries. All other Member States have opted for a multiple-rated tax system, where, generally, they only apply a reduced rate to reduce the regressiveness of the VAT system.<sup>16</sup> Spain, France, Ireland, Italy and Luxembourg, in addition to the general and one reduced rate, also apply a super reduced rate.

Certain Member States apply parking rates. These are the countries that had introduced VAT before 01/01/1991, and their standard rate did not exceed 15 percent. These countries are allowed a transitional period. The problem lies in the fact that neither the delivery types nor the length of the transitional period are imposed on those countries to the privileged position. As disadvantages have been placed on the admissible exemptions of individual Member States, there has long been a requirement to extend the list of goods and services to which a reduced VAT rate may be applied and which is considered to be unlikely to cause disturbances in the functioning of the Single Market of the European Union.

## 6. THE FUTURE WAY OF DETERMINING THE VAT RATE

The proposed new system will provide equal flexibility to member states in determining the tax rate. With the standard tax rate of at least 15% of the member states could determine in the future:

- two separate reduced tax rates of between 5% and the standard rate of the Member State;
- one exemption from VAT (ie „zero tax rate“);
- one reduced tax rate between 0% and the height of the reduced tax rates.<sup>17</sup>

The current complex list of products and services from the Directive to which the reduced tax rates could apply would be abolished and replaced by new so-called „negative“ list that would contain products such as: weapons, alcoholic beverages, gambling, tobacco products, etc. Standard tax rate would always have to be applied on these categories of products. The novelty is that the weighted average VAT tax rate will have to be at least 12% in order to ensure sufficient funds in the budgets of the Member States and the Union. The new regime also provides continuing use all rates different from the standard rate.

<sup>16</sup> *cf. ibid.*, p. 71

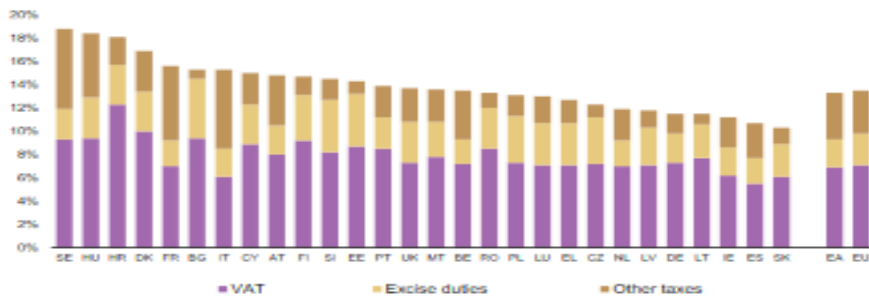
<sup>17</sup> Kesner-Škreb, *op.cit.* note 14, p. 2

## 7. EFFECTIVENESS OF VAT RATES AS A DISTRIBUTIONAL TOOL

Consumption taxes are generally an important source of revenue for Member States' governments, although there are significant differences between countries. In general, 'new' Member States tend to raise a higher proportion of their revenue from consumption taxes. Bulgaria and Croatia stand out with tax on consumption generating around half of total revenue.

Various other consumption taxes (besides VAT, taxes on energy, and alcohol and tobacco duties) also constitute important sources of revenue for certain Member States. As a percentage of GDP, VAT revenue ranged from 5.5% in Spain to 12.3% in Croatia.<sup>18</sup>

**Graph 1:** Consumption tax revenue as a percentage of GDP in 2012



Source: Tax Reforms in EU Member States 2015, Tax policy challenges for economic growth and fiscal sustainability X/2015, European Commission, Luxembourg: Office for Official Publications of the European Communities, ISBN 978-92-79-51181-3, p. 35

The use of reduced rates and exemptions considerably narrows the VAT base in many Member States and VAT revenue is therefore far below the level that could theoretically be collected were all consumption taxed at the standard rate. Limiting the use of reduced rates and exemptions can help to avoid economic distortions, reduce compliance costs and increase tax revenue. It should be noted that the VAT Directive<sup>19</sup>, requires Member States to make certain compulsory exemptions, but

<sup>18</sup> Tax Reforms in EU Member States 2015, Tax policy challenges for economic growth and fiscal sustainability X/2015, European Commission, Luxembourg: Office for Official Publications of the European Communities, ISBN 978-92-79-51181-3, p. 35

<sup>19</sup> Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax [2006] OJ L347

leaves it to their discretion as to whether to apply reduced rates and a set of additional non-compulsory exemptions.

Consumption taxes do indeed have a regressive effect when the cost to households is measured as a percentage of current income, but can be shown to be generally either proportional or slightly progressive when their effect is measured as a percentage of expenditure.<sup>20</sup> They may, however, also be slightly regressive when measured as a percentage of expenditure if few reduced rates and exemptions are applied.

OECD confirms the findings presented in previous studies as regards the effectiveness of reduced VAT rates as a distributive measure. It shows that many of the reduced rates introduced to support low-income households, such as reduced rates on food and on energy products, do increase the purchasing power of these households. Nonetheless, it also clearly shows that reduced VAT rates are a poorly targeted and costly way of achieving this aim. At best, rich households receive as much benefit from a reduced rate as do poor households. At worst, rich households benefit much more than poor households. In some cases, the benefit of reduced VAT rates to rich households is so large that they actually have a regressive effect—benefiting the rich more not only in absolute terms, but also as a proportion of expenditure. This is generally the case for most reduced rates introduced to help meet social, cultural and other objectives.<sup>21</sup>

## 8. CONCLUSION

When it comes to reduced tax rates in the value added tax system, today they can be more justified on political and historical grounds, and much less on the scientific and professional level. Among financial theorists today, there is a great deal of consensus that the success of the value added tax is significantly increased by the introduction of a single-rated taxation system (S. Crossen, M. Rose, A. Tait). Commitment to a single-rated VAT system is explained by the fact that today, especially in developed countries, social circumstances are such that there is no need to apply reduced tax rates, and it has been proven that value added tax, due to its regressiveness, is a bad instrument distribution of income, so this distribution should be realized through other, more suitable instruments. For these reasons, it is often argued in professional discussions that the application of a higher tax rate in the value added tax system can only be justified for political and historical reasons.

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<sup>20</sup> Tax Reforms in EU Member States 2015, *op. cit.* note 19, p. 86

<sup>21</sup> *ibid.*

Given that supporting low-income households is one of the main reasons for applying reduced VAT rates, the results provide some evidence in favour of a simpler VAT system with few reduced rates (which would, correspondingly, be more efficient and have lower compliance costs). This argument is based on the view that support to low-income households can be better achieved through more direct mechanisms such as income-tested cash transfers (i.e. benefits). A targeted cash transfer can generally compensate the vast majority of low-income households for the loss in purchasing power they would suffer as a result of reduced VAT rates being abolished.

Experts recommend the application of VAT, which includes a very wide tax base, ie the allocation of tax burden on as many products and services being placed on the market, a small number of rates (ideally only one and possibly one reduced), and the application of zero rates only for export.

However, in spite of all the advantages of a single-rated system and of the EU's massive effort to reduce number of rates, all member states continue to apply a multi-rated VAT system.

It is an undisputable fact that to a greater extent fiscal and economic impacts are realized through value added tax. Social effects are only partially realized through the value added tax system themselves, while others have to be realized through other instruments and measures of the tax system.

When it comes to the solution of the problem of regressivity of VAT, it is best to apply the measures within the tax system and outside the VAT system. The Republic of Croatia recognized the problem and uses the model of combined measures. It recognized that not only the fiscal goal of taxation matters but the social goal aswell. The most effective measure to mitigate the regressive effect of VAT is the use of progressive tax rates when personal income is taxed in the combination with tax reliefs and exemptions. In this case we recognize the personal qualities of a taxpayer such as age, dependent family members, children, disability and combine them with the use of broken progressive tax rate on personal income. But there is an open question of how effective the progressive taxation of income is if we apply only 2 progressive rates and consequently how can such a type of progressive taxation affect the annullment of the regressive effect of VAT.

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